Declaration

The thesis is my original work and has not been submitted previously for a degree at this or

any other university/institute.

To the best of my knowledge it does not contain any material published or written by another

person, except as acknowledged in the text.

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This is to certify that this thesis is based on the work of Ms. D.N. Hettiarachchi under my supervision. The thesis has been prepared according to the format stipulated and is of

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1

Abstract

Nowadays, improving business processes is one of the main concerns of companies since it helps them to stay alive and reach their objectives. Although business process improvement could be addressed through several ways, Business Process Automation is one of the best solutions which span boundaries of an organization and provide significant business benefits for enterprises by containing costs, improving performance and efficiency.

The main purpose of this thesis is to provide a comprehensive view on how the Business process of Saloon Sharona has been automated by implementing a web site.

Salon Sharona provides all the bridal needs and provides haircut service and now company needs to have an online directory of all the professional wedding solutions providers to make it easy for their customers to reach their all sort of wedding needs in no time easily. And to make Appointments online through web site for haircuts .And to provide the ability to modify or cancel the appointments.

In order to develop this website numbers of technologies were used such as PHP, HTML, JavaScript, MySQL and CSS. Although the PHP, JavaScript and HML are more features full, the developer is more comfortable with PHP and HTML as he had previous experience and more interest on those web languages than other web development languages in coding those languages and also, Apache server 2.4.4 was used for the PHP coding support.

The project was finished meeting the user expectations. User feedback was positive and they found the system easy to use and extremely helpful for both clients and customer.

Acknowledgement

I am using this opportunity to express my gratitude to everyone who supported me throughout this project. Specially I am thankful to Dr. K.L. Jayarathne at UCSC, the supervisor of this project for his support and guidance.

In the same time I express my special thanks to staff at Saloon Sharona for the help given to me in this engaged. I am sincerely grateful to them for sharing their truthful and illuminating views on a number of issues related to the project.

In addition I will be thankful to the library staff at UCSC for the support they have given for me.

I have taken efforts in this project. However, it would not have been possible without the kind support and help of my parents & all other family members and my friends for their kind cooperation and encouragement At last but not least I would like to thank all my friends for their support in many ways to make this research a reality and I would also like to thank all the other people who helped me to be in this position of thinking which help me in completion of this project

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List of Abbreviations

BMI – Body Mass Index

DB – Database

IT – Information Technology

MVC - Model-View-Controller

RUP – Rational Unified Process

UAT – User Acceptance Testing

UI – User Interface

WBDPS - Web Based Diet Planning System

Chapter 1: Introduction

1.1 Introduction

Due to competiveness of the Salon industry, every Salon company tries to get their business automated . This proposed web is salon management site with appointment scheduling functionality. In this web user can review salons and stylist online and can make Haircut and Bridal appointment online. In this web site owner can give details of the services they offer and also describe the stylist information. User can review the salons and their services using this site and can make appointment with favourite stylist online. User can also cancel/modify appointments online. User can also write and reviews about the salon or stylist. This system helps both the customer and the salon. Customer can easily find best service in their locality and can check the review of other customer of that salon online. It helps him to take decision of taking the services of a this salon.

Salon Sharona provides all the bridal needs and provides haircut service and now company needs to have an online directory of all the professional wedding solutions providers to make it easy for their customers to reach their all sort of wedding needs in no time easily. And to make Appointments online through web site for haircuts .And to provide the ability to modify or cancel the appointments.

1.2 Purpose of the Project

Aim of this dissertation is to address the drawbacks of existing manual booking method and highlight benefits of the proposed web site. Automating appointment book will help you organize your employee schedules, expedite client check in and check out, and generate concise activity reports.

Main object is to streamline the appointment making process by automating and will increase productivity, salon may be able to increase business from clients that prefer phone booking by having online booking ,Customers can call the saloon assistance and get do their booking or they can login to website and do it by them self. When the salon or spa is closed, offering only phone booking means that clients cannot book appointments when there is no one to pick up the phone and look at the calendar. Salon staff will have more time (and less interruptions) when talking to new clients that want to learn about the salon, or existing clients that need help figuring out what services they want to book.

Further it the online website can be used as a promotional media . as web site displays all the services that are available at saloon now .Further all weeding need can be satisfied through this web site .

Following are the Benefits proposed website:

Online scheduling system is a Web-based application that allows individuals to conveniently and securely book their appointments and reservations online through any Web-connected device, such as a computer, laptop, smartphone or tablet. They typically access the online scheduling system through a "Book Now" button found on a Web site or page,. Once a date and time are selected, the system will automatically confirm the booking and instantly record it within the system, without any staff action needed. And will get an automatic notification to through emails.

In addition to online scheduling, online scheduling systems also come equipped with other beneficial features like automated e-mail reminders, which the system sends out to booked individuals on a prior to their scheduled appointment; recording and record-keeping capabilities that make it quick and simple to access data associated with a specific appointment;

Time savings. Staff spends less time on the phone booking and managing appointments, thereby freeing up their schedule for more important and pressing tasks. Booking individuals also save time, as they no longer have to commit a part of their busy schedule to calling their medical, healthcare or wellness provider (or remain on hold, which adds minutes to the scheduling process).

Monetary savings. The time savings experienced by a facility can translate into monetary savings, as both staff time and services translate into expenses and revenue, respectively. As staff resources can now be directed at other tasks, a scheduling system can eliminate the need for a staff member to work overtime or for management to hire new staff members to handle the work overload created by the appointment-scheduling process.

24-Hour Convenience. Scheduling appointments over the phone usually requires an individual to phone in during office hours, as few facilities offer round-the-clock phone booking. This is an inconvenience for most patients, as they too are working at this time. Additionally, many individuals prefer to schedule their appointments online rather than over the phone. An online

scheduling system allows for 24-hour scheduling, not just during normal facility or office hours

1.3 System Approach

Approaches for the project were taken in more than a single methodology. The study area was a totally separate and advanced area to the developer. Therefore the developer happened to do more and more research on the salon on line appointment systems and Bridal dressing appointment systems. Research was done by searching online e books and research papers to get the initial idea for business of salon. After acquiring initial knowledge then started studying the real time appointment booking system by monitoring the existing system of Salon Sharona. Then learn and study the difficulties they are facing and monitored them and identified by interviewing the customers and employees.

The project was done with a better and standard approach of project management methodology which is used commonly in the industry level. Though there was not a team to build the software the developer has to do it in a state of well disciplinary manner because the users of the system are with special needs and the developer cannot work with them as per the customers of a normal development project. The communication method and number of meetings were planned before starting the project as well as Encourages appropriate communication and planning prior to the start of project work. The Establishment a means for managing projects more efficiently was very important when carry on the project work. The supervisor at University of Colombo School of Computing were tracking of progress against pre-determined metrics and facilitate standardized reporting.

As development approach a research was done to identify the most suitable and practical technology to implement the system. The capabilities of the developer were considered as well as the user requirements. Needed tools were installed to the developer's computer such as PHP, WAMP server as development tools

Since the implementation was done as an academic project the developer has happened to be strict with deadlines. Therefor the development approach has to be very clear and suitable. Waterfall method was used as the development approach as the requirements were clear and fully understandable. Waterfall methodology is the one that is the most used across all industries, and it is very common in software development and construction.

There are many versions of the waterfall method, but the original one included the following high-level phases are;

- Requirements specification
- Design
- Develop
- Integration
- Testing
- Installation
- Maintenance

1.4 Scope of the Project

The system will support Online appointment for Hair cuts and online directory of weeding providers. This application will be developed to be implemented in place of existing manual system. This application provides effective online system for the customers. The specific purpose of this system is streamline the current process and improve the online booking system and to provide up to date information about the saloon.

Proposed Web based Wedding directory and online haircut appointment system will consist of below features;

- Data collection
- Data Processing
- Reports for decision making

1.5 Motivation

Aim of this dissertation is to address the drawbacks of existing manual booking method and highlight benefits of the proposed web site.

Main object is to streamline the appointment making process by auto mating and will increase productivity ,salon may be able to increase business from clients that prefer phone booking by having online booking ,Customers can call the saloon assistance and get do their booking or they can login to website and do it by them self. When the salon or spa is closed, offering only phone booking means that clients cannot book appointments when there is no one to pick up the phone and look at the calendar.

Salon staff will have more time (and less interruptions) when talking to new clients that want to learn about the salon, or existing clients that need help figuring out what services they want to book.

Further it the online website can be used as a promotional media . as web site displays all the services that are available at saloon now .

Further all weeding need can be satisfied through this web site

1.6 Structure of the Thesis

Chapter 2-Literature Review

Requirement Gathering, Analysing and Management techniques are discussed. Functional and non-functional requirements of the proposed system will also be included.

Chapter 3-Analysis and Design

Initial design diagrams and the methodological approach used in the system designing, alternative approaches and their justification for not using in the system are discussed.

Chapter 4-Implementation

Appropriate coding and implementation tools and techniques which will be used developing the system are included.

Chapter 5-Evaluation and Testing

Developed system will be tested against the user requirements which are gathered at the beginning. Actual data from the client's environment will be used.

Chapter 6-Conclusion and Future work

Discuss about the system enhancements which could be done in the future. This will also provide a summary note of the system achievements at last.

Chapter 2: Background and Literature Review

2.1 Introduction

Salon Sharona currently having a totally manual system to book appointments of haircut and bridal dressing. The appointment booking are done through a diary manual ,Further there is no website for the company and Details of there services ,Promotions are distributed to clients using handouts Which is a cost for the company because of the huge printing cost.

2.2 Common Solutions

Since a person has to manage appointment bookings there are lot of mistaken in reservations and mainly two or more appointments gets reserved for same time due to user errors. It is a major draw back of the current process and it leads to customer dis satisfaction. Also the promotions and details of the services are distributed through leaflets it's a waste of money. Also in order to take appointments over call always there should be a person on phone In order to minimize and overcome above draw backs of the current system web based system is been proposed

2.3 Literature Review

A beauty salon may just offer hair care & hair styling services, or nail services, manicures and pedicures. Most businesses classified as beauty salons offer a combination of hair styling and nail services. In addition, beauty salons may offer skin care services performed by estheticians, including facials, exfoliating scrubs and anti-aging techniques. Many beauty salons also offer cosmetic services such as makeup application, eye beautification, and general makeovers and cosmetic instruction.

"Salas, Mega fashion magazine,2013"[1] says that when people talk about beauty, certain things come to mind-makeup or designer outfits or skincare line-limiting the concept of beauty to something superficial. Beauty icon Audrey Hepburn, however, disagreed when she said that the beauty of woman is not in the clothes she wears, the figure that she carries, or the way she combs her hair. True enough, many will agree that real beauty comes from somewhere deeper than skin. Life Science believes in exactly that.

Online Appointment Scheduling is an optional feature that is included with all packages of software. Your business can have its own, customized web site and your clients can book appointments and view your business's information such as services offered, specials,

location, over the Internet. This also gives the researcher a background regarding the aspects which have been studied and not yet studied.

"Patricia McLaughlin 1990"[2], over 26 million of people visit a beauty salon, and 68 of them choose their own hairdresser or stylist for psychological reasons. Some of customers talking with their hairstylist for their own problems and many of the customers believe in the advice of the stylist. McLaughlin states that "Too much advertising and you may have overspent". One of the biggest challenges of salon owner is getting the marketing mix right. Over the years, salon's owners learn how to advertise their business in a proper way, a little way and they also doing a trials and errors.

Rather than that Beauty salons may have some difficulties in treating some customer's. "Marissa Gold 2013"[2] noted that "communicate pretty clearly". She says that she wanted to have a tiny trim for her hair but unfortunately the stylist do and hours later her hair cut an inch. And in the other time the other stylist threaded her eyebrows and then she believe that going to salon without a proper stylist is such a waste of time.

"Melody McCloskey 2013"[3] as a former manager of online content at Current TV. The San Francisco start up helps consumers find and book a hair stylist, aesthetician, makeup artist or other beauty professional online. McCloskey stated that "The whole process was so cumbersome." McCloskey wants to review sites and read another reviews. Finding a stylist is difficult because oftentimes they weren't available so you will wait for the next couple of weeks. Feeling frustrated is a way when you not find the best stylist.

Having an online salon can have a different tactics in terms of business industry. "Alexei Kouleshov, 2011"[4]. According to him booking for the salon has greatly improved to the world. In the past, customers will go to the salon and personally check the schedule of desired salon stylist and designers so you can make an appointment. According to him now the advantage is you can make choices of the services offered made by the salons. On his article there are several options of contacting a salon. One is the phone booking for salons which you can use your phone in contacting a specific salon, and the other one is the online booking system its uses a World Wide Web because of the cyber world many business owners realize how effective the cyber world or internet is.

The process for booking in the online salon is not complicated. You simply log-in in the specific data that they wanted to know, the time of your availability and the stylist that you really wanted. Having an online is such a really advantage of some business owners.

Advertising through internet is a way to communicate with other people like Netizens. "StyleSeat Salon 2011"[5] used an online booking for their customers. Customers can make appointments online. StyleSeat has booked more than 2 million appointments, adding up to more than \$100 million in business for beauty professionals. Veronica Belmont, stated that in Style seat "It's much more convenient for my schedule," an on-the-go technology and gaming web video host in San Francisco. She used StyleSeat to find a hair and makeup artist for her wedding last fall and to have her hair done before a tech awards show last month. Aileen Lee agrees on what Belmont says. She said that "People are getting used to convenience and access," deciding to get your nails done or your hair cut, you can just simply log-in through internet and book your appointment there. It only take 30 seconds and you can have this reservation on you. Anita Chan, a licensed aesthetician, opened her skincare studio about three months ago in San Francisco's Japan town. Previously, she had operated her business out of her home while – for about two years – she also juggled a job as an international flight attendant. Through the use StyleSeat, she has been able to move beyond Facebook to have a presence on a beauty-specific site. She also uses StyleSeat to communicate with clients and make booking appointments easier. Chan also said that "It saves me so much time."

Chapter 3: Analysis and Design

3.1 PEST Analysis

Political

- Change of government rules and regulations for business
- Introduce new loans and small scale business
- Introduce new instruction programmes for beauty cultural field through youth centres
- Government introduce higher taxes for business products

Economical

- Decreasing interest rate for business loans
- Increasing cost of cosmetics
- Decreasing personal income of people
- Increasing price of beauty culture instruments

Social

- There are so many Christian people around the salon
- Increasing more sales in New Year, Christmas seasons and in weeding seasons
- Higher demand for western haircut fashions
- Some times in wedding seasons most parents want traditional dressing for their young children

Technological

- Automation –give opportunity to customer to get appointments through online
- Use internet for promotions
- Technology incentives use laser treatments for pimples
- New galvanise tools for facial treatments
- Use head message/oil treatments for hair dressing
- New skin whitening creams and technical machines
- R&D activity
- Automate the manual process of business

Table 3.1 PEST Analysis

3.2 SWOT Analysis

Weakness
 • Majority of appointments dates are based on manually so its Difficult to conduct and process the results • High Maintenance cost • High user error rate
Threats
Technology changes

Table 3.2 SWOT Analysis

customer demand and trust

3.3 Similar System Comparison

3.3.1 Setmore - online booking system for salons

Setmore[8], reduces your scheduling and booking woes with a simple, yet efficient online booking system for salons, which does much more than appointment scheduling,

Setmore is an all in one solution which provides:

An easy to use online booking system for salons.

Your personalized online booking page - customers can book their own appointments.

Send text and email reminders to customers - reduce no-shows.

An integrated customer management system - store and process customer details.

An address book which automatically stores all your customer information.

Ensures there is no overlap of appointments.

Online Booking For Your Spa - Manage customer appointments online

At our core, we have built an online booking system which you can use to grow your salon business. Offer your customers the necessity of appointment booking without the hassle of waiting over the phone for a long time. Trust us, both your staff and customers will be extremely pleased that you chose Setmore as your online spa booking system

Management

We help manage not only the appointments but also your staff schedules including breaks, time-offs, holidays and so on. Nothing is left to chance, we believe in providing the best possible solutions to manage both, your customer appointments and your staff schedules and timings.

Building a relationship with your customers requires time and effort. But above all, it requires the forethought of saving their information which can be accessed anytime and anywhere. We believe that investing your time and effort without knowing how to get in touch with customers is nothing but waste of time. Don't you agree?

With Setmore, you don't need to worry about such things anymore. Setmore automatically stores all your customer information including some special notes your staff might want to note for them.

Automatic notifications

The world offers too many distractions, and in their busy lives, you don't want your customers to forget their appointments. We have integrated appointment notifications and reminders through sms and emails as a part of our booking system. This helps in reducing noshows to your business and also helps in making your customers feel special.

3.3.2 Salon iris - online booking system for salons

Security

Salon Iris[7] keeps track of everything that happens with your information and even backs it up automatically for you. You decide who sees what by controlling permission to every feature in the software.

Client Management

Design a loyalty program, track purchases, and store photos and notes to provide an unforgettable salon experience for your clients! Never lose touch with e-mail and text messages sent right from your software.

Point-Of-Sale

Check out is effortless with integrated credit card processing and barcodes on all your products. Coupons and gift cards are easy to create and even easier to scan when clients redeem them. They'll boost your growth instantly!

Reporting

Comprehensive and detailed reporting is important in order to make informed decisions that positively impact your business. With over 200 reports to choose from, you can be sure, whatever the metric, Salon Iris has what you're looking for.

3.3.3 Salonlite - salon and spa appointment scheduling system

Salonlite[6] is the world's first specifically designed free salon and spa appointment scheduling system.

Cloud Based

iPad, PC or Mac as long as you have access to the Internet you can run your business completely free of charge.

Business Intelligence

Access a wealth of business stats, displayed in a simple, easy to read dashboard or detailed reports.

Linked Appointment

Link Appointments including processing times, allowing a more technical services.

Built in SMS and Email

No more excuses! SMS appointment reminders, mean that your clients always know when their next appointment is.

The Mobile Solution

Access Salonlite on any Internet enabled device. Fully optimized for Apple iPad, iPhone, Android and Windows phones.

3.4 Requirements

In this system there are several methods to collect requirements. Interviews, Questionnaires, User reviews are the famous methods of gathering requirements. To provide the best solution to a specific problem, the analyst must go through every single aspect of the proposed system to fulfill the user requirement.

3.4.1 Fact Finding Methods

Questionnaires: A collection of questions that helps to identify the functional and nonfunctional requirements of the system has been given to a set of users.

Interviews: By interviewing Dieticians, it will help to have a good idea about the current sicknesses and advices. Also it will help to find the special features that can be added to the system in future.

Gather data from e-books, Internet: This will help to have a good understanding about the nutrients each food has, what is good and what is bad.

Prototyping: By a prototype of the system, functional and nonfunctional requirements of the system can be understand properly.

3.4.2 Functional Requirements

- User registrations -This system will allow user to get registered with the saloon ,
 Registered users can log into system and do on line haircut booking reservations
- Salon Services Portfolio of services –the website will display list of services with detail descriptions
- Add review comments –Web site will provide the facility to add comments on the comment forum
- Image & video gallery of salon services videos and image gallery will be available on the web site
- Social media integrations –Link to social media will be available on web site
- Add photos to website –There will be a facility to add photo to web site
- Add Videos to website –There will be a facility to add videos to web site
- Add business providers –Business providers can be added to website
- Delete business providers Business providers can be removed from the to website
- Get complete details of each provider and their business
- Add promotions –Promotion details can be added to website
- Add advertisements –Advertisements can be published on website
- Salon Customer Feedback –there will be a forum to provide customer feedback

Make online Appointments for Hair cuts using calendar and check availability of the

required client

Send Appointment confirmation email /sms

Provide Cancellation of hair cut online Reservation before one day

Modify hair cut appointments

Make online appointments for bridal dressing

Modify and cancel of online bridal reservations

Reports -get reports of haircut schedules depending on hair cutter .These reports will be

available in PDF format

3.4.3 Interface requirement

Booking Interface: This enables the user to perform the booking online appointments /modify

online appointments and cancel online appointments, (haircut reservation and bridal dressing)

Registration Interface: This enables the user to log into website

3.4.4 Non Functional Requirements

Appearance— The website should be more attractive and interactive. Appearance of the site

should be beautiful and the visitors should not feel bored to visit the site.

Availability/Reliability/Security - Website should be operated on 24hours a day. It should

available to everyone. Reliability of the website should be very high. There should not be any

crashes in the system and should available for anyone when in need.

Reliability - Requirements about how often the software fails. The measurement is often

expressed in MTBF and it should be considerably less. Otherwise the users will not be

comfortable with the system.

Performance – Website should perform well because users should be able to visit the website

without any interruptions and anyone should be able to do bookings according to their

requirements without much delay. This will totally depend on the bandwidth of their internet

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connection. High performance is required in the areas such as response time as not to confuse the user.

Supportability -The system is consisting with future modifications. In future, if any changes to the system are required they can be done easily without changing the overall

Accuracy - The system should be accurate in all functionality to not to confuse the user. Showing the availability of the stylish should critical functions of the system and it should be accurate it is critical functions of the system. Also sending email to client should be very accurate.

Usability - Usability is a main constrain. User is provided a help manual in the system. This will guide user or the operator in driving the system in a perfect manner. Anyone should be able to easily understand the system and use it without any problem. Anyone should be able to get relevant information easily

User Interface and Human Factors - The user interface used is a graphical user interface (GUI). When the user clicks buttons, select the checkbox item, uses the mouse or perform any relate action, an interface event occurs. A little training for the user to the system is needed. A preliminary user manual with all user commands, screen formats. An explanation is giving how to feedback and error messages.

Supportability - The system is consisting with future modifications. In future, if any changes to the system are required they can be done easily without changing the overall

3.4.5 Software Requirements

The final system runs on a typical web environment which consists of relational database system, web server, web application, and the user interface or client browser. The system was developed in a single machine or server with the following software installations listed in Table below.

Items	Software Product	Description
Web Server	XWAMP Server 2.4.23	Used as local server
Web Applications	PHP 5.5.38	Used as developing
	Java Script	languages
	CSS3	
	HTML5	
Database	MySQL 5.0.11	Used as Database server
Database Interface	phpMyAdmin	Used as Database interface
Web Browser	Mozilla Firefox /IE/Chorome	Can use on Mozilla,Firefox or Chorome

Table 3.3: Software Requirements

3.4.6 Hardware Requirements

	Minimum Specifications	Recommended Specifications
Processor	Intel Core i3 or equivalent	Intel Core i5 or better*
Memory	2 GB	4 GB or more
Wired Network Card	10/100 basseT Ethernet	10/100 baseT Ethernet
Hard Drive	64 GB hard drive space	80 GB hard drive space or
		larger
Head Phone	USB connectivity	USB connectivity
	Table 3.4 :Hardware Requirements	

3.5 System Architect

The final system runs on a typical web environment which consists of relational database system, web server, web application, and the user interface or client browser.

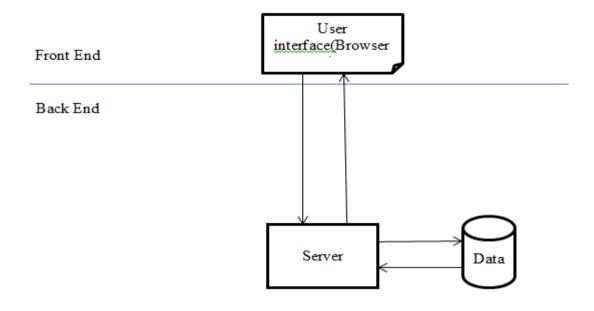


Figure 3.1 System Architect

Basically there are two parts of the main survey system, namely front and backend. User will be logged on to the system using front end (interface) and they won't have access to the back end. So once user have logged on to the system and completed any reservations then these data get pumped into the database and get them stored. Backend side of the salon system consists of most of operational functions

This proposed system will act as an information repository while getting the customer feedback and this will be helpful to identify customer needs as well as to provide useful information's to the company

3.6 Methodological Approach

Since the appointment booking requirement became such important factor in people's life cycle, this system was concerned to develop. The identification of the target audience is the key success of this project. This implementation will be beneficial to many people who have internet access in general. Among them the core segment will consist of people who are looking for weeding information all at one place and people who are using saloon for their day-to-day activities.

Hence this entire implementation can be considered as deductive approach of research. Further to the data to be analysed, this whole effort is up to provide qualitative output.

The main process of this project is centralized to the qualitative research type. The users will be beneficial to get used of some quality product out of this.

3.6.1 Rational Unified Process

The Rational Unified Process (RUP) is an iterative software development process framework created by the Rational Software Corporation, a division of IBM since 2003 (Figure 3.4). RUP is not a single concrete prescriptive process, but rather an adaptable process framework, intended to be tailored by the development organizations and software project teams that will select the elements of the process that are appropriate for their needs. This process consists of 4 phases. Namely,

- 1. Inception phase: Scope the project, define the business case.
- 2. Elaboration phase: Refine the requirements, establish architecture, and mitigate the most technical risk.
- 3. Construction phase: Complete the system up to a point where it can be deployed in limited context ("beta version").
- 4. Transition phase: Finish the product and reach product final release.

Iterative Development

Business value is delivered incrementally in time-boxed cross-discipline iterations.

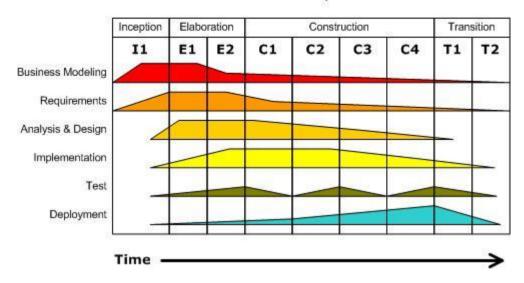


Figure 3:1 RUP Phase and Disciplines

Each phase has zero, one, or more iteration, but generally at least one. The RUP has guidelines and heuristics on how to define phases, iterations, number and duration of iterations, and iteration objectives.

3.6.2 Agile development

Agile software development refers to a group of software development methodologies based on iterative development, where requirements and solutions evolve via collaboration between self-organizing cross-functional teams.

Agile software development uses iterative development as a basis but advocates a lighter and more people-centric viewpoint than traditional approaches. Agile processes fundamentally incorporate iteration and the continuous feedback that it provides to successively refine and deliver a software system.

There are many agile methodologies, including:

- Dynamic systems development method (DSDM)
- Kanban
- Scrum

3.6.3 Prototyping

Software prototyping is about creating prototypes, i.e. incomplete versions of the software program being developed. The basic principles are:

Prototyping is not a standalone, complete development methodology, but rather an approach to try out particular features in the context of a full methodology (such as incremental, spiral, or rapid application development (RAD)).

Attempts to reduce inherent project risk by breaking a project into smaller segments and providing more ease-of-change during the development process.

The client is involved throughout the development process, which increases the likelihood of client acceptance of the final implementation.

While some prototypes are developed with the expectation that they will be discarded, it is possible in some cases to evolve from prototype to working system.

A basic understanding of the fundamental business problem is necessary to avoid solving the wrong problems, but this is true for all software methodologies.

3.6.4 Waterfall Module

System was developed adhering to waterfall methodology. The whole process was done by a single person including gathering requirement and feasibility analysis in the initial stage following by designing database, designing system, developing the system, system testing and implementation. The requirements were fully understood and clearly defined in the initial stage of the system lifecycle. This system was not supposed to use Moodle or any other plugging since the users are having special needs. Third party plugins were all complex than the capability of users who are using the system. Since the system users are people with special needs I did not have intend to make the users exhausted by several meetings and discussions. Therefor all the requirements were finalized before start designing and developing.

In the waterfall model, the developers should follow the order of the steps and one step should be completely finished to proceed to the next step. Back tracking is not possible. Steps can be state as,

- Requirement Analysis
- Design
- Implementation
- Verification
- Maintenance

The project is developed as waterfall model. Before started the project all requirements are captured and documented. Then the design part has been done and project prototype was designed. Project was implemented as per the design done in design phase. Implementation phase was bit time consumed as some parts were bit hard to implement as designed. But final output as same as design phase and tally with the requirements.

Testing also done for each and every module of the project and completed successfully. Deployment and maintenance part is yet to come. Any future addition or if any new requirement occur, this will be done under maintenance phase.

As in the initial stage author had clearly identify the project requirement and the objective. Design was made to cater that requirement. Implementation and verification were done respectively after completing the design. Hence waterfall model is the software model used in this project.

3.7 UML Diagrams

Following types of UML diagrams were used in order to evaluate the design and make the design process accurate and effective.

- Use Case diagram
- ER diagram
- Activity Diagram
- Sequence Diagram

Use case diagram, Activity diagram and Sequence diagram are attached on Appendix B

3.8 Database Design

Database is one of the main parts of this Web System. Database of this system was designed using SQL server express.

Tables and fields were named according to a constant convention. Short named were omitted as much as possible to avoid confusions. Every table has meaningful names to get the understanding of the table's records.

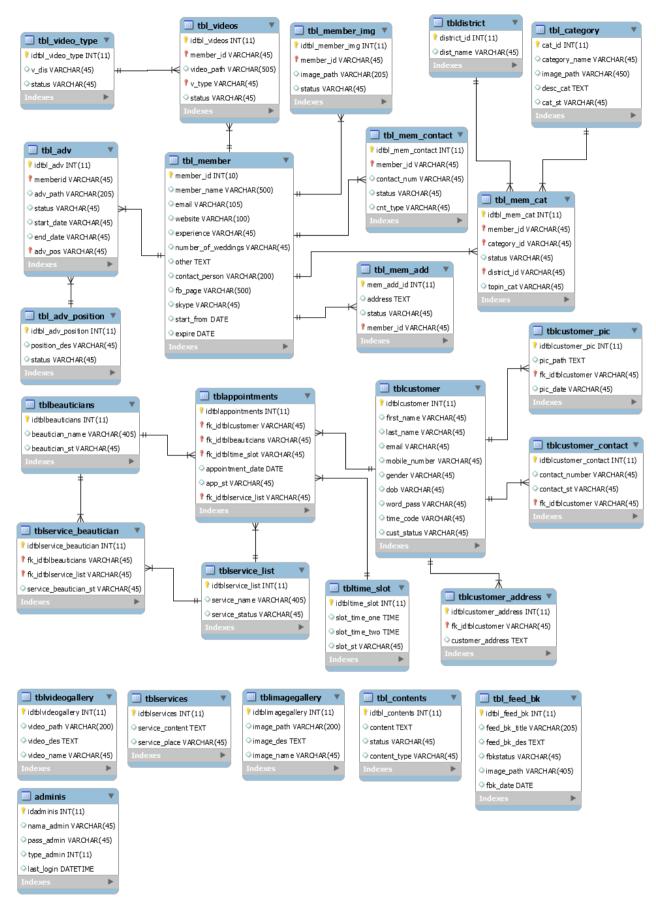


Figure 3:2 ER Diagram

Chapter 4: Implementation

4.1 Project direction

This chapter will discuss flow of the project, milestones of the project, Project designing and final implementation of the project.

The system was developed by a single user. When selecting suitable developing strategy it was important to consider the capabilities of developer and the time he or she get to learn new strategies and apply them in real system developing. To be developing a grate piece of software the developer need to have specific experiences for the developing language. Some of them are;

- Experience for the specific framework
- Experience of the language
- General software developing skills
- General software development skills
- General software debugging skills
- Good design skills
- Domain specific knowledge
- Understanding of the existing code base

Considering those factors the developer is most familiar with PHP and HTML than other web development languages. The time assigned was also considered while selecting proper technology as there was no much time to study a new language from the sketch.

Proposed project is not changed. The system has been developed according to the project proposal. Project was on the proposed direction. There are some slightly changes have been done, but overall concept and design was done as per the project plan. During the implementation phase some pages have been changed due to proper use of this concept.

4.2 Implementation Technologies and tools

4.2.1 Programing Languages

Following Programming Languages have been used to develop this website.

a)PHP

PHP is a server-side scripting language designed primarily for web development PHP is a server-side open source scripting language that is used to help improve and facilitate web development. And it is 100% free. There is no need for expensive software or the need to purchase licenses. PHP works out of the box with Apache, PostgreSQL, and MySQL databases. There is a very minimal cost threshold to build a successful site.

PHP is easy to read and understand. It is also easy to use and understand PHP provides more control over websites than any other programing language. Other languages require long tedious scripts, whereas PHP lets you complete the same functions with just a few lines of code. PHP is also open source, so it's readily available for you to edit anything and everything quickly and easily.

PHP works well with other languages and services such as HTML, CSS, as well as various databases. PHP scripts can have tags, which makes it easy to insert and mix between HTML tags, enabling web content to be highly dynamic. Since PHP is written between tags, code and functions can be written in any order within a document. This eliminates the need to manage and make sure your code is in the right place.

b)Java Script

JavaScript is a programming language commonly used in web development.Like server-side scripting languages, such as PHP and ASP, JavaScript code can be inserted anywhere within the HTML of a webpage. However, only the output of server-side code is displayed in the HTML, while JavaScript code remains fully visible in the source of the webpage.

It can also be referenced in a separate .JS file, which may also be viewed in a browser.

Following Markup Languages have been used to develop this website.

a)HTML/HTML5

HTML is a markup language used for structuring and presenting content on the World Wide Web. It is the fifth and current version of the HTML standard.

b)CSS/CSS3

Cascading Style Sheets (CSS) is a simple mechanism for adding style (e.g., fonts, colors, spacing) to Web documents. These pages contain information on how to learn and use CSS and on available software. They also contain news from the CSS working group. CSS3 is a latest standard of CSS earlier versions

c)MySql

MySQL is a freely available open source Relational Database Management System (RDBMS) that uses Structured Query Language (SQL). SQL is the most popular language for adding, accessing and managing content in a database. It is most noted for its quick processing, proven reliability, ease and flexibility of use. MySQL is an essential part of almost every open source applications.

This enables a cost effective system delivery with reliability and good performance. MySql is a very ideal database for a small to large scale systems and working extremely well for projects like online diet planning system. Easy administering is also one of the reasons for select this as the system database of this system.

4.2.2 Software

Following Software have been used to develop this website.

a)XWAMP as Local server

XWAMP is a free and open source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters for scripts written in the PHP and Perl programming languages.

b)MySql Workbench

MySQL Workbench is a unified visual tool for database architects, developers, and DBAs. MySQL Workbench provides data modelling, SQL development, and comprehensive administration tools for server configuration, user administration, backup, and much more.

c)Adobe Photoshop – Picture editing

There are some picture editing required while developing this web application. Author manages to use her knowledge in to some extents to create some visual objectives in this project by using Adobe Photoshop. There are no any special reasons to use this other than experience of using the software before and it's user friendliness, popularity and features.

d)Adobe Dream viewer – Picture editing

Adobe Dreamweaver is a web design and development application that combines a visual design surface Dreamweaver lets its users design, code and manage websites as well as mobile content. Dreamweaver is positioned as a versatile web design and development tool that enables visualization of web content while coding. There are no any special reasons to use this other than experience of using the software before and it's user friendliness, popularity and features.

4.2.3 3rd Party Tools

a)CKEditor

CKEditor is a browser-based WYSIWYG content editor. This means the content being edited in it looks as similar as possible to the results end users will see after it has been published. It brings to the web common word processor features found in desktop editing applications like Microsoft Word and OpenOffice.

b)Thickbox Gallery

Thickbox Gallery is a web-based image gallery using PHP and JavaScript. It is a webpage UI dialog widget written in JavaScript on top of the jQuery library. Its function is to show a single image, multiple images, inline content, iframed content, or content served through AJAX in a hybrid modal.

4.3 Development and Implementation Considerations

The proposed system was built in to the typical Web Browsers such as IE, Mozilla Firefox and Google Chrome on the Windows platform as the system was implemented to be matched to commonly using browsers by customers.

Coding was done with following several good practices which are need to be followed when coding using web technologies such as PHP and HTML. PHP is a complex language that has agonized years of twists, bends and bounces. It is highly inconsistent and sometimes gives complex errors. Each version has its own unique features and it is hard to keep track of what version has what problems. There for the coding good practices was important when developing. Adobe Dreamweaver and Photoshop was used as integrated development environment which makes coding easy by providing syntax highlighting, code completion and error warnings and refactoring.

Indentation and white space was used to ensure that the code is readable and easy to search. In the same time the code was written using meaning full naming conversions and comments as needed.

There are many ways to connect to a MySQL database in PHP. Following method was used to connect with the database in this system development.

For developing the database the MySQL was use as it is an open source database system and use by simply downloading free. In order to use MySQL which is the most popular type of database to use with PHP XWAMP server was installed because installing MySQL by own can be a challenging process. XWAMP is drop-in installs of MySQL it is clean and simple. MySQL is robust and it provides excellent performance. Most importantly MySQL need only less disc space. MySQL can easily learn by using tutorials even for a new users and it is very suitable for simple applications.

4.4 Sample screens of the project

In this section sample screen shots of the project will be shown. Not the all screens but some important pages will be displayed. Basically the system will provide online haircut appointment, bridal dressing appointments for the users. In the home page there are night navigation tabs on top of the page which Home, link to About Us, Services, Wedding Items, Picture Gallery, Vedio Gallary, Feedback and , Contact us pages, Book Now. The first eight

pages will provide basic information of the web site and users do not need to sign up with an account in order to get used of above pages.

The main page is designed as a one page website as all links are located in the main page itself. The navigation is very easy and this concept is latest as of today web designing.

In order to get an Haircut or Bridal dressing Appointment through the system, users need to register in the system first. During the registration, basic information of the user will be gathered and that will need to use a valid email address and need to have a verification before proceeding further. Once the user successfully logged in to the system, user will be redirected to the Appointment booking panel which will allows user to see availability of stylist date and time in graphical view . Further already booked time slots will not be selectable by user.

Separate admin panel is created for admin user who is responsible for administrative tasks of the salon. In order for this below reports have been implemented Appointment Report, Acitve Customer list ,List of customers who have not confirmed their emails , Blacklisted Customer list

(i)Home Page

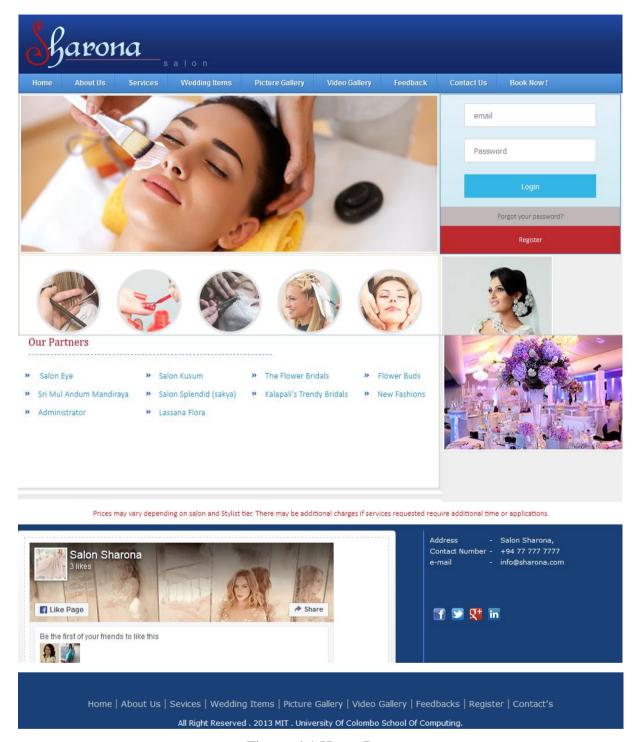


Figure 4.1 Home Page

(ii) About Us Page



Figure 4.2 About Us

(iii) About Services available at Salon Sharona

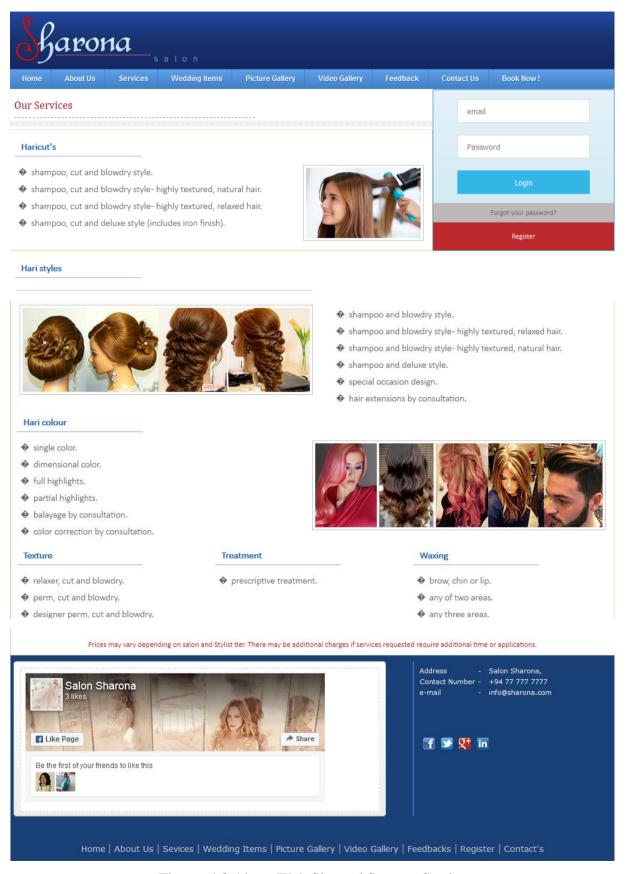


Figure 4.3 About Web Site and Success Stories

Figure

(iv)Image Gallery page



Figure 4.4 Image Gallery Page

(v)Video Gallery page

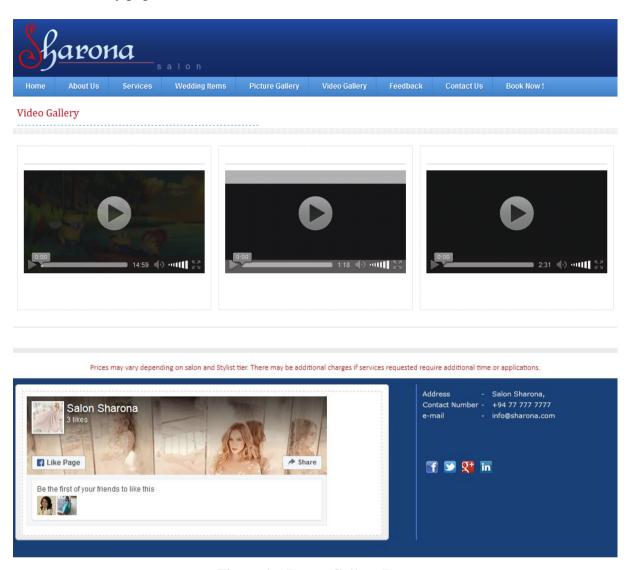


Figure 4.5 Image Gallery Page

(vi)Haircut and Bridal dressing Booking of the website

This allows admin user to edit diet /fitness plans, check new users and user count, get user feedback alerts, etc.

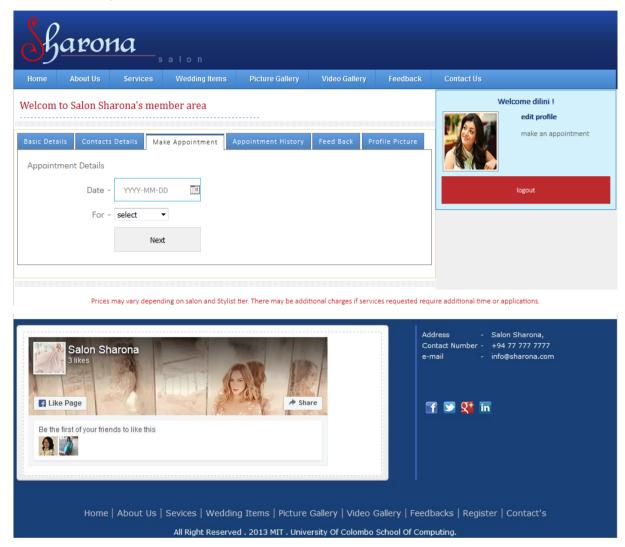


Figure 4.6 Make Appointment

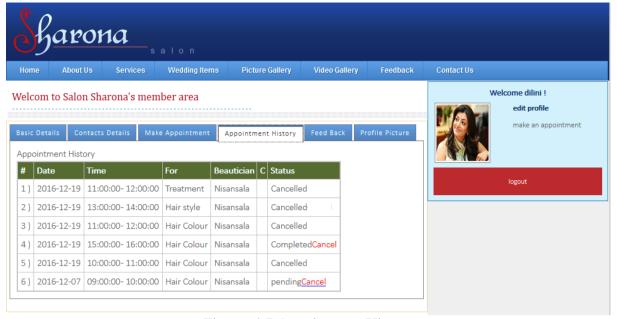


Figure 4.7 Appointment History

(vii)Admin Panel

This allows admin user to Add remove check modify content on te website, Also allows to manager new users, services, get user feedback, and allows to manage Appointment bookings

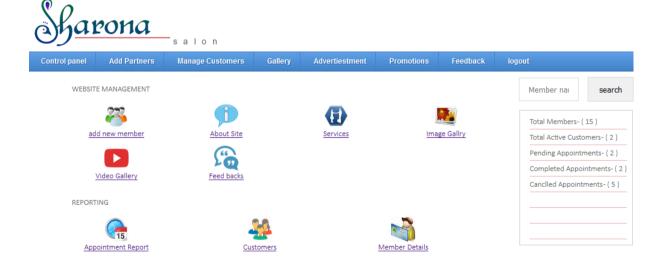


Figure 4.8 Admin Panel

(viii)Reports

Admin user is provide with below Dashboard ,will easy the Management of Customer portfolio from Customer Report

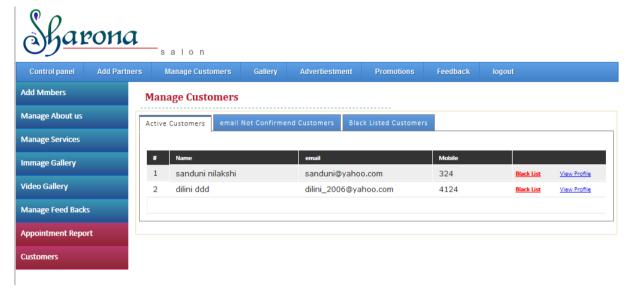


Figure 4.9 Active Customer List

Admin user will have the summary of appointments and will provide the facilities to manage the appointments

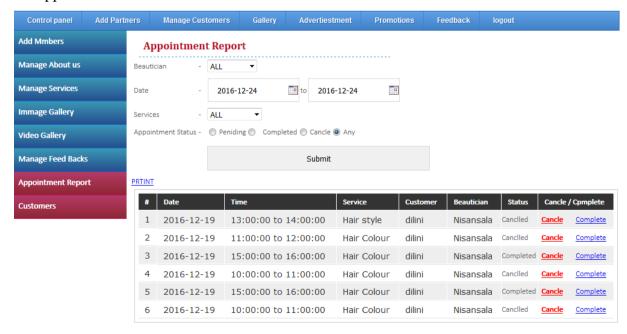


Figure 4.10 Appointment Report

Chapter 5: Evaluation and Testing

5.1 Evaluation

As any other project or work, a software solution also has to evaluate for its quality. There are many aspects of a software evaluation. Moreover, there are many ways of evaluating software. A group of stakeholders containing system users, system developers, designers, from both software developing party as well as the client party should be involved in proper system evaluation

Another way of evaluating a software system is by third party professionals or commercial body. If the software is intended for general users, distributing alpha or beta evaluating copies in an effective method. Most of the professional software developers including Microsoft, Mozilla and GNU project distribute their software as alpha for selected small registered group for testing. Bugs founded by these users are fixed and then the beta version which is generally anyone can used is released. The advantage of alpha and beta releases is that thousands or millions of users use this software and evaluate it. However, this method could be only used for non-custom made popular software, which does not have any issue of being exposed to the general public users.

In the evaluation process, following areas were evaluated against the system requirements laid out at the beginning of the project.

5.1.1 Non-Functional Requirements Evaluation

Performance Requirement

Performance of the system is in a high satisfied level. There is no waiting time between loading pages and user will not get confused because of very well performance.

Accuracy

Since there are no online transaction or any other responsible functionality accuracy is not a critical requirement. But the system is accurate in all functionality in a level of to not to confuse the visually impaired students. Functionality testing was done in both lecture end and student end to ensure the accuracy.

Reliability

Requirements about how often the software fails. The measurement is often expressed in MTBF and it should be considerably less. Otherwise the users will not be comfortable with the system.

• Usability

Since the usability is a main constrain of this system is web based. The employees were happy system interfaces.

5.1.2 Functional Requirement Evaluation

All of the functional requirements captured or requested by the client were implemented in the final Web System. However, the system can be adding more functionality in the future such as voice commanding and implement it as a Moodle plugging. Due to limitation of time for researching and study new technologies in order to design and implementing those functionality would not be added. However, the system was build taking considerations of future expansion and developments. Hence the system could be upgraded easily by the developer later on.

5.2 User Feedback

5.2.1 Staff Feedback

User feedbacks were taken by using online survey form the staff after a short demonstration of the system. (Survey has been carried out using the same survey form on 5.8.2) Replies ware recorded and analysed. Replies were given a mark from one to five, one being poor and five being excellent.

These feedbacks were collected from about fourteen different types of users including Staff at Salona Sharona,

Feed back Type	Allocated Marks	Number of Replies
Poor	1	0
Reasonable	2	2
Average	3	1
Good	4	10
Excellent	5	1

Table 5.1 Evaluating Staff Feedbacks

5.2.2 Web Based Survey for Customers Feedback

To understand more about the public customers opinion I carry out a survey using Survey Monkey Web Survey service, published under name "Review for Salon Sharona website" and Under below web

URL"https://www.surveymonkey.com/r/Preview/?sm=ydfmQV01sSg_2BoW0Omb0qEBat1i KkvmgqnP5k9o0DXN4Me5If7iupAXCOrvKHfgS6" which contain questions,

Questions are:

- Age Limit ?
- Staff or Customer ?
- Designation?
- Experience ?
- At Which rate do you rate the system?

Screenshots of Survey Questionaries' forms is attached to Appendix D

Evaluation of Customer feedback

Feedback Type	Allocated Marks	Number of Replies
Poor	1	0
Reasonable	2	3
Average	3	5
Good	4	17
Excellent	5	5

Table 5.2 Evaluating Customer Feedbacks

5.3 Testing

It is needed to do testing for software to identify the differences between given input and expected output and evaluate assess the feature of an item of a software. It involves every stage of software development lifecycle to assess the quality of the product and verification and validation of each and every step of the process as well as the modules of the software. Some are defining that software testing is only be done after developing the software units, but it is always important to have an idea on how the software will be test after developing it. If the development does with that idea in the mind we can reduce more and more errors and defects of the end product. It is also reduce the repetitions of lifecycle which need to be done to correct the errors.

There are many benefits of testing to the end product of software. Therefore testing cannot be considered as an alternative process. Testing should be done throughout the main process to eliminate the unwilling defects will be produce by malfunctioning of code written, newly made errors due to adding new functionalities to the code and understanding of user requirements incorrectly or carelessly. Furthermore testing ensure the system response correctly all acceptable data types and amount of data as input, ensure the time of response is acceptable to do the functionality as accepted and also ensure the usability level of the system is up to the user expectations.

There are many testing types that we can practice throughout the whole process of system development. Some of them are;

• Unit testing

Which is done by the developer by his or her self at the time of coding and there, will not be any tester or other party involves. System has been developed in module by module and each module has been tested as unit testing (Home Page, User Registration Module, Make Appointment module, Cancel appointment ect

• Black box testing

As part of this project I had to rely on black box and white box testing as the application testing method. While developing this project mostly I had to run on debug mode to find out the issues which are exist with the system. This may time consuming since each of the phases should workable and verified before moving in to the next level. This hierarchy is far more similar to waterfall design. One piece of code should work and it leads to the next level. Therefore "test and run" was the main consideration though out this project

As part of black box testing I had to check inputs and outputs of the data once executed.

Test cases will be attached to Appendix A

Positive and negative test scenarios has been executed. Therefore it will cover most of user scenarios, when they are using the real system as the final product. Because by mistake they will be able to enter wrong user name or password then system should be able to identify and give an error message otherwise user may get confused.

Smoke testing

This testing does to verify the basic flow of the required flow is working. Less time is required other than the rest of the testing methodologies and sanity testing verify that the other testing can be started. Smoke Testing has been done after integrating all module Below test has been carried out as smoke test, Register new user, Make an appointment, Cancel that appointment ect

UI testing

Testing does in order to verify the user interfaces are up to users expectation and to find out any alignment, size or colour combination issues. UI Checklist that has been used is in 5.2 section

• Functional testing

Functional testing refers to activities that verify a specific action or function of the code. All the functions that user is going to do with the system need to be tested throughout the functional testing. Register new user , Make an appointment ,Cancel that appoinment,View weeding directory, Administration functions has been done ,Test cases that has been used are attached in Apendix A

Regression testing

Regression testing focuses on finding defects after a major code change has occurred. This is important because there can be changes in previously done code or totally unavailable of features may occur after changes. Register new user , Make an appointment ,Cancel that appoinment,View weeding directory, Administration functions has been done as part of regression test,Test cases that has been used are attached in Apendix A

Cross browser testing

Web based systems which are using variety and lager number of users may use many web browsers. Therefore it is essential to test the system in all commonly use web browsers. The test scenarios that has been used is in Table 6: Sample test case for Browser compatibility

Usability testing

This testing is to verify how it is easy and compatible the users to use the system. Any novel user should be able to use the system with no or less user training.

As part of the application testing, UI testing is one of the key areas which need to be covered. Users directly interact with the user interface therefore it should work as expected. Following is one of the test case designs to capture the UI visibility in each browser. This will be an easy way of capturing and record browser compatibilities and visibilities of each component while interacting with other user interfaces.

Features	UI Properties to be Font Type /Font Siz Button color/ Butto Link Color Back ground color Margin gaps/ Consi	e/Font Color/ Hea n Size	·	the Mockups	s				
	Win XP- FireFox 20	Win XP- Chrome	Win XP- IE 7	Win 7 - IE 8	Win 7 - Fire Fox 20	Win 7 - Chrome	Win 7 - IE 9	Mac Safari	Mac Fire Fox
Front page									
Different tabs									
User logins									
user logouts									
View of reports									
Navigation									

Table 5.3 Sample test case for Browser compatibility

So what I have done is, made the "default browser" option to each browser while testing and run the code on debug mode to ensure that this application is compatible and visible in every browser and then I have tested the navigation, login and other functionalities with each browser.

5.4 UI Checklist

Required Fields

If the screen requires data entry on a specific field, designers should identify the required fields with a red asterisk and generate a friendly warning if the data is left blank.

Data Type Errors

If the screen contains dates, numeric, currency or other specific data types, ensure that only valid data can be entered.

• Field Widths

If the screen contains text boxes that allow data entry, ensure that the width of data entered does not exceed the width of the table field (e.g. a title that is limited to 100 characters in the database should not allow more than 100 characters to be entered from the user interface).

• Cosmetic Inconsistencies

The screen look, feel, and design should match the other screens in your application. Creating and using a style guide is a great way to ensure consistency throughout your application.

• Grammar and Spelling

Ensure the test cases look for grammar or spelling errors.

Error Messages

Ensure that error messages are informative, grammatically correct, and not condescending.

• Screen Font Type

Ensure that the screen font family matches from screen to screen. Mismatching fonts within the same sentence and overuse of different fonts can detract from the professionalism of your software user interface.

Screen Font Sizes

Ensure that the screen font sizes match from screen to screen. A good user interface will have an accompanying style guide that explicitly defines the font type and size for headers, body text, footers, etc.

Colours

Ensure that screens do not use different colour sets as to cause an inconsistent and poorly thought-out user interface design. Your style guide should define header colours, body background colours, footer colours, etc.

Buttons

If your application has buttons (e.g. Submit, OK, Cancel, etc), ensure that the buttons appear in a consistent order from screen to screen (e.g. Submit then Cancel).

• Delete Confirmations

It is a good practice to ask the user to confirm before deleting an item. Create test cases to ensure that all delete operations require the confirmation. Taking this a step further, it would also be great to allow clients to turn off specific confirmations if they decide to do this.

• Save Confirmations

It is good practice to ask the user to confirm an update if updates are made and they navigate to another item before explicitly saving. Create test cases to ensure that all record movement operations require the confirmation when updates are made. Taking this a step further, it would also be great to allow clients to turn off specific confirmations if they decide to do this.

• Grammar and Spelling

Ensure that you have test cases that look for grammar or spelling errors.

Test cases will be attached to the appendix C.

5.5 Testing types used for the system

The system was built according to testing standards from the beginning to the end. The test cases were written and verified while the design phase and they were updated accordingly in the later stages of the development process. Unit testing was done by the developer while coding each and every module. As the coding was done using Dream viewer it was easy to conduct unit testing. Dream viewer was highlighting any of the coding or syntax error and the corrections were done at the moment itself.

Smoke testing was done at the beginning of every functionality test to ensure the basic functionality of the system was working properly. Otherwise there were no uses of doing functionality testing of the system. Several functional testing cycles were conducted after implementing the most critical features of the system and ensure the accuracy of those functions by executing test cases. Throughout the each functionality testing UI testing was also done to verify the interface designing. Dream viewer software was used in UI Testing further Microsoft Paint was used as a tool to ensure the alignment of the interfaces.

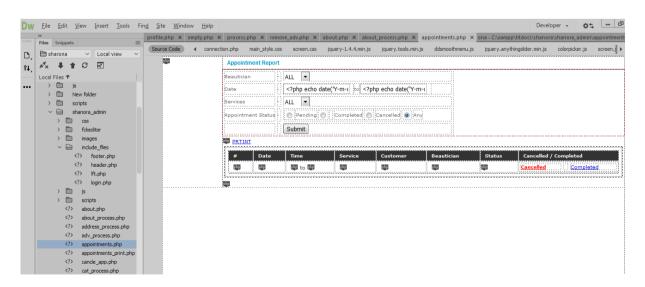


Figure 5.1 UI Testing with Dreamviwer

Regression testing is also done to ensure the previously built functionality after adding new functionality to the system. The system has tested in several web browsers. They are Mozilla Firefox, Internet Explore and chrome. Cross browser testing also done while doing the regression testing.

Finally the usability testing has done by examined the user facial expressions at the of using the proposed system.

5.6 Defect tracking

All the found issues will be added to the excel document and share separately. We won't use any defect tracking tool for defect tracking.

5.7 Test automation

Selenium base test automation framework has developed for testing. As mentioned in the test strategy integration and UAT scenarios can be automated. Scripts will be run time to time make sure nothing has broken. This will be added to future testing.

5.8 Reviews and sign off

Before system development start test plan has reviewed and sign off. All the testing activities happen focusing the guideline mention in the test plan.

Chapter 06: Conclusion and Future works

6.1 Conclusion

Author was a novice to this filed of technology, certain things were need to learn from the beginning. The experimental work was a big deal due to lack of literature and the freshness of the subject. Research was more challenging when the technical limitations made issues at certain points. It drastically affected the final outcomes and diffused the intensity of the overall success to some extent. Research experiments could have been carried out more intensively and widely if the technical limitations did not impose boundaries on the research process. Though the selected problem domain has been answered with proven results of the web application, the outcomes could have been were more precise and accurate. The given time was adequate to handle the project and author is really happy to complete the dissertation within the given time frame even though how touch problems have faced during the project time framework.

As to the records given in the testing and evaluating phase it is shown that almost all of the useful features, which were gathered in the requirement capturing states were implemented. Moreover it shows that the captured requirements were useful to the users and they actually help staff of the salon as well as the customers of the salon.

This system is satisfactory reason for me as this will be definitely a useful system for any one which won't be waste even after the project time frame and can be developed with more enhance features.

Finally, the author is happy to state that, the entire work of this research study was successful and author has achieved all the objectives of the research within the given time period.

6.2 Problems uncounted & Lessons Learned

This section will conclude the development of web application by considering all the outcomes of the entire research process and development process. Author has managed to carry out this project methodically and systematically to accomplish all the related objectives to find out the answers to the problem domain.

The project progress was hindered by a difficult faced during both the design and the development phases. It was a new experience to work with salon industry people and the developer was not supposed to meet them frequently. It was required a great deal of researching and thinking out of the box. There were many similar systems to refer in the

developers reach and the professional to get knowledge. However the project was completed up to satisfactory level as to the developer's point of view.

6.3 Critical Evaluation of the Project

User and staff feedback has been collected and analysed as below .These feedbacks were collected from about fourteen different types of users including Staff at Salona Sharona, and 30 different customers of the saloon.

Feed back Type	Allocated Marks	Number of Replies
Poor	1	0
Reasonable	2	2
Average	3	1
Good	4	10
Excellent	5	1

Table 6.1 Evaluating Staff Feedbacks

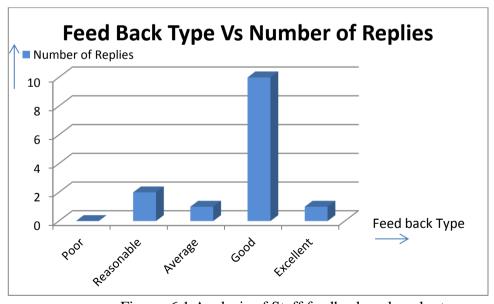


Figure 6.1 Analysis of Staff feedback on bar chart

When all the replies were collected the average of the replies for a specific section was calculated. The result was rounded up to the nearest integers and reply responding to that mark.

Average of marks =
$$[(1*0) + (2*2) + (3*1) + (4*10) + (5*1)] / 14$$

= 3.571

Rounded value = 4

That is corresponding good results were taken on behalf of the system.

Evaluation of Customer feedback is as follows

Feedback Type	Allocated Marks	Number of Replies
Poor	1	0
Reasonable	2	3
Average	3	5
Good	4	17
Excellent	5	5

Table 6.3 Evaluating Customer Feedbacks

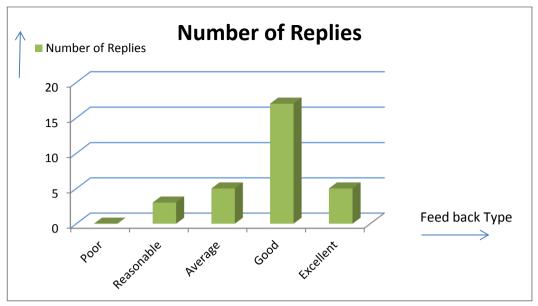


Figure 6.2 Analysis of Customer feedback on bar chart

When all customer replies were collected the average of the replies for a specific section was calculated. The result was rounded up to the nearest integers and reply responding to that mark.

Average of marks =
$$[(1*0) + (2*3) + (3*5) + (4*17) + (5*5)] / 30$$

= 3.8

Rounded value = 4

That is corresponding good results were taken on behalf of the system.

Rounded value of the user and customer feedback is as 4 ,So as per this values this website can be ranked at a good rate.

6.4 Future works

The project has developed successfully as included in the project proposal, but the current system can be further enhanced with below functions

- Enhance developing a mobile application for this web site
- Enhance the site with shopping cart integration functionality
- Enhance the site with online payments for some services as all services will not be offered at flat rate

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Appendices

Appendix A – Test Cases

Module 1 User Registration

Test case 1 Launching the Sharona site

Test case ID	Steps	Expected results
		Site should be display
1	Launch Sharona web site	successfully

Test case 2 Verify First Name

User should be in the Register Page Click on Register Link Pre-condition which will navigate user to Register Page

Test case ID	Steps	Expected results
	Keep the first name field	Should be able to keep the first
1	empty	name field null
		Should display error message
		indicating user to fill this empty
		field and cursor should be
2	Click on Register button	pointed to that field
	Verify spelling on Required	No spellings or grammar errors
3	field validation message	on popup message
		Name should be entered
4	Enter First Name	successfully
	Modify the entered first	Should be able to modify the
5	Name	entered Name

Test case 3 Verify last name field

Pre-condition User should be in the Register Page

Test case ID	Steps	Expected results
	Keep the last name field	Should be able to keep the last
1	empty	name field null
		Should display error message
		indicating user to fill this empty
		field and cursor should be
2	Click on Register button	pointed to that field
	Verify spelling on Required	No spellings or grammar errors
3	field validation message	on popup message
		Last Name should be entered
4	Enter Last Name	successfully
	Modify the entered Last	Should be able to modify the
5	Name	entered Last Name

Test case 4 Verify email field

Pre-condition User should be in the Register Page

Test case ID	Steps	Expected results
		Should be able to keep the last
1	Keep the email field empty	name field null
		Should display error message
		indicating user to fill this empty
		field and cursor should be
2	Click on Register button	pointed to that field
	Verify spelling on Required	No spellings or grammar errors
3	field validation message	on popup message
		Verify email format is checked
4	Enter an invalid email	@ .com will be checked
		Email should be entered in
5	Verify format of the email	correct format

		Email should be entered
4	Enter Email address	successfully
	Modify the entered email	Email should be modified
5	address	successfully

Test case 5 Verify Mobile No

Pre-condition User should be in the Register Page

Test case ID	Steps	Expected results
	Keep the Mobile Number	Should be able to keep the last
1	field empty	name field null
		Should display error message
		indicating user to fill this empty
		field and cursor should be
2	Click on Register button	pointed to that field
	Verify spelling on Required	No spellings or grammar errors
3	field validation message	on popup message
		Mobile No should be entered
4	Enter Mobile No	successfully
	Modify the entered Mobile	Should be able to modify the
5	No	entered Mobile No

Verify Gender Radio

Test case 6 Button

Pre-condition User should be in the Register Page

Test case ID	Steps	Expected results
	When loading the page	
	Gender should be selected by	Either Male or Female should be
1	default	selected
	User should be able to	When male is selected should be
	change the selection as	able to modify the selection to
2	required	Female

Test case 7 Verify Date of Birth field

Pre-condition User should be in the Register Page

Test case ID Steps Expected results

1	Keep the DOB field empty	Should be able to keep the DOB field null
		Should display error message indicating user to fill this empty
		field and cursor should be
2	Click on Register button	pointed to that field
	Verify spelling on Required	No spellings or grammar errors
3	field validation message	on popup message
		Selected DOB should be get set
4	Select Date of Birth	successfully
		Should be able to modify the
5	Modify the entered selection	selected date

Test case 8 Verify password field

Pre-condition User should be in the Register Page

Test case ID	Steps	Expected results
	Keep the password field	Should be able to keep the
1	empty	password field null
		Should display error message
		indicating user to fill this empty
		field and cursor should be
2	Click on Register button	pointed to that field
	Verify spelling on Required	No spellings or grammar errors
3	field validation message	on popup message
4	Enter password	Password should be entered
		successfully
5	Modify the entered password	password should be modified
		successfully

Verify Confirm password field

Test case 9 field

Pre-condition User should be in the Register Page

Test case ID	Steps	Expected results
	Keep the password field	Should be able to keep the
1	empty	password field null
		Should display error message
		indicating user that password
		doesn't match and cursor should
2	Click on Register button	be pointed to that field
	Verify spelling on Required	No spellings or grammar errors
3	field validation message	on popup message
4	Enter confirm password	Password should be entered
		successfully
5	Modify the entered password	password should be modified
	_	successfully

Test case 10 Verify Password and confirm password matches

Pre-condition User should be in the Register Page

Test case ID	Steps	Expected results
	Enter Confirm password	Password and confirm password
1	different to password	values should be identical
	Enter Confirm password	Password and confirm password
2	equal to password	values should be identical

Test case 11 Verify Register User

Test case ID	Steps	Expected results
	Execute test case 1-10 Click on Register Button	New user should get added to
1		DB
	Go to DB table Customer and check above added	Customer should get saved
		E
2	Customer appear on table	successfully

Test case 12 Verify Register User on DB

Pre-condition Execute Test cases 1-10

Test case ID	Steps	Expected results
	Go to Sharona salon admin	
	panel	New user should get added to
1		DB
	Go to DB table Customer	
	and check above added	Customer should get saved
2	Customer appear on table	successfully

Verify Register Users

Test case 13 appear on Admin panel

Pre-condition User should be in Admin panel->Customer tab

Test case ID Steps	Expected results
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	Go to Sharona salon admin panel ->Customer tab	Active users should appear on
1		Active user tab
	Go to DB table Customer and check all active	Customer on DB should be equal to the customers on Admin
2	customers	panel customer tab

Test case 14 Verify Black List functionality on Active customer tab

Pre-condition Execute Test cases 1-10 Exist an Registered user

Test case ID	Steps	Expected results
1	Execute test case 1-10 Take the Name of that user	-
2	Go to DB and make the user Active	Customer should get saved as active on DB
3	Go to Admin panel and click om Customer link and go to Active customer Tab	Active customers on db should be loaded here
4	Click on Blacklist link on above customer	Once blacklist link is ticked user name should get removed from this tab
5	Go to Blacklist customer Tab	Above customer should appear on blacklist customer tab

Test case 15 Verify View Profile functionality on Active Customer tab

Pre-condition Execute Test cases 1-10 Exist an Registered user

Test case ID	Steps	Expected results
	Execute test case 1-10 Take the Name of that user	
1		-
2	Go to Admin panel and click on Customer link and go to Active customer Tab	Active customers should appear on this tab

3	Verify View profile link appears	View profile link should appear for all customers
	Click on view profile link	Respective profile should get
4	Chek on view prome mik	loaded

Test case 16 Verify Email not confirmed customers

Test case ID	Steps	Expected results
	Execute test case 1-10	
	Take the Name of that user	
1		-
2	Go to DB and check the email confirmed status	By default user should get added as email confirmed status as 0 on DB
2	Goto Admin Panel-> Email not confirmed customers tab	All users which are emails not confirmed should appear on Email not confirmed customers
3	Verify customer names	tab
4	Modify email confirmed status on DB and commit	email confirmed status on DB will be 1
5	Verify above Customer name not appear on Email not confirmed customers tab	Above user name should get removed from Email not confirmed customers tab

Verify Black List functionality on Email not confirmed Test case 17 customer tab

Pre-condition Execute Test cases 16

Test case ID	Steps	Expected results
1	Execute test case 1-10,16	-
2	Click on Black list link on Email not confirmed tab	Customer should get removed from Email not confirmed tab and that name should goes to

	Blacklisted Customer tab

Verify View Profile functionality on Email not Test case 18 confirmed customer tab

Pre-condition Execute Test cases 1-10 Exist an Registered user

Test case ID	Steps	Expected results
	Execute test case 1-10	
	Take the Name of that user	
1		-
	Go to Admin panel and click	
	on Customer link and go to	
	Email not confirmed	Email not confirmed customers
2	customer Tab	should appear on this tab
	Verify View profile link	View profile link should appear
3	appears	for all customers
	Click on view profile link	Respective profile should get
4	1	loaded

Test case 19 Verify Customer Blacklist functionality

Pre-condition Execute Test cases 1-10 Exist an Registered user

Test case ID	Stone	Expected regults
1 est case ID	Steps	Expected results

1	Execute test case 1-10 Take the Name of that user	-
2	Go to Admin panel and click on Customer link and go to Active customer Tab	Active customers should appear on this tab
3	Click on blacklist link on Active customer tab	Blacklisted customer should get removed from Active customer list and should appear on Blacklisted customer tab

$\begin{array}{ccc} & Verify\ View\ Profile\ \ functionality\ on\ Blacklisted\ customer \\ Test\ case\ 20 & tab \end{array}$

Pre-condition Execute Test cases 1-10 Exist an Registered user

Test case ID	Steps	Expected results
	Execute test case 1-10	
	Take the Name of that user	
1		-
	Go to Admin panel and click	
	on Customer link and go to	Blacklisted customer customers
2	Blacklisted customer Tab	should appear on this tab
	Verify View profile link	View profile link should appear
3	appears	for all customers
	Click on view profile link	Respective profile should get
4	-	loaded

Test case 21 Verify Remove Customer Blacklist functionality

Pre-condition Execute Test cases 1-10 Exist an Registered user

Test case ID Steps	Expected results
--------------------	-------------------------

1	Execute test case 1-10 Take the Name of that user	-
2	Go to Admin panel and click on Customer link and go to Blacklisted customer Tab	Blacklisted customer customers should appear on this tab
3	Verify Remove blacklist link appears	Remove blacklist link should appear for all customers
4	Click on Remove blacklist link	Blacklisted profile should get removed from blacklist customer tab it should appear on Active customer list

Module 2 Login User

Verify Login –Active

Test case 22 members

Pre-condition User should be in the login page and should have a valid login

Test case ID	Steps	Expected results
	Enter Correct Email Address	
1	of Active member	
		User should be able to log into
2	Enter correct password	system

Verify Login Not allowed Test case 23 for inactive members

Pre-

condition User should be in the login page and should have a valid login

Test case ID	Steps	Expected results
1	Enter Correct Email Address	

	of inactive member	
		User should not be able to log
2	Enter correct password	into system

Verify Login Not allowed Test case 24 for blacklist members

Pre-

condition User should be in the login page and should have a valid login

Test case ID	Steps	Expected results
	Enter Correct Email Address	
1	of blacklisted member	
		User should not be able to log
2	Enter correct password	into system

Verify Login not allowed Test case 25 with incorrect password

Pre-

condition User should be in the login page and should have a valid login

Test case ID	Steps	Expected results
1	Enter Correct Email Address	
		User should not be able to log
2	Enter in correct password	into system

Verify Login not allowed Test case 26 with incorrect Email

Pre-

condition User should be in the login page and should have a valid login

Test case ID	Steps	Expected results
	Enter incorrect Email	
1	Address	
2	Enter correct password	User should not be able to log

	into system
	into system

Verify Forget password

Test case 27 functionality

Pre-

condition User should be in the login page

Test case ID	Steps	Expected results
	Click on forget password	
1	button	Direct to forget password page
	Enter email address and	
2	DOB	-
		Password should get reset
1	Reset password	successfully

Add Modify Basic

Module 4 information

Test case 28 Verify Modify basic data

Pre-

condition User should logged into the system

Test case		
ID	Steps	Expected results
		Existing values of login customer should
1	Go to basic detail tab	appear
	Existing values on below	
	fields should get available	
	First name ,Last Name	
	,Email, Mobile No ,Gender,	Existing values of login customer should
2	DOB	appear
	Modify any of below or all	
	of below fields	
	First name ,Last Name	
	,Email, Mobile No ,Gender,	
	DOB and click on save	
3	button	Modification should get save successfully

Test case 29 Verify Enter Address

Pre-

condition User should logged into the system & Execute Test Case 28

Test case	Stone	Ermoated wegults
ID	Steps	Expected results
		Existing values of login customer should
1	Go to Contact detail tab	appear
	Enter Address click on save	
2	address button	Address should get save successfully

Test case 30 Verify Modify Address

Pre-

condition User should logged into the system & Execute Test Case 28,29

Test case ID	Steps	Expected results
		Existing values of login customer should
1	Go to Contact detail tab	appear
	Modify Address click on	Modification of Address should get save
2	save address button	successfully

Test case 31 Verify adding Contact No

Pre-

condition User should logged into the system & Execute Test Case 28,29

Test case ID	Steps	Expected results
		Existing values of login customer should
1	Go to Contact detail tab	appear
2	Enter contact no and click on add button	Contact no should get save successfully it should appear on below on grid format

Test case 32 Verify Modify Contact No

Pre-

condition User should logged into the system & Execute Test Case 28,29,31

Test case ID	Steps	Expected results
		Existing values of login customer should
1	Go to Contact detail tab	appear
	Modify contact no click on	Modification of contact no should get save
2	Add	successfully

Test case 33 Verify Remove Contact No

Pre-

condition User should logged into the system & Execute Test Case 31

Test cas ID	e	Steps	Expected results
			Existing values of login customer should
	1	Go to Contact detail tab	appear
		Click on remove link in	Existing contact no should get removed
	2	front of contact no	successfully

Make an Appointment For

Module 4 Haircut

Verify making Appointment for Haircut

Test case 34 using calendar

Pre-

condition User should logged into the system

Test case ID	Steps	Expected results
	Go to Make Appointment	
1	tab	-
	Select the date from	
2	Calendar	Should be able to select the date from calendar
	Select Hair cut option from	Selected value should get set on for combo
3	"For" dropdown list	box
		User will get navigate to Appointment detail
		view above selected date and option should
4	Click on Next button	appear correctly
	Select the Stylist from	Selected t stylist should appear on Beautician
5	Beautician drop down list	field
	Select Required time slot one	
6	or many	One or many time slot should be selected
7	Click on Save button	Appointment should get saved successfully
	Verify time ,Stylist on	Appointment should get saved with the
8	Appointment	entered time ,Stylist

Verify making
Appointment for Haircut
Test case 35 entering date

Pre-

condition User should logged into the system

Test case ID	Steps	Expected results
	Go to Make Appointment	
1	tab	-
2	Enter date from keyboard	Should be able to select the date from calendar
	Select Hair cut option from	Selected value should get set on for combo
3	"For" dropdown list	box
		User will get navigate to Appointment detail
		view above selected date and option should
4	Click on Next button	appear correctly
	Select the Stylist from	Selected t stylist should appear on Beautician
5	Beautician drop down list	field
	Select Required time slot one	
6	or many	One or many time slot should be selected
7	Click on Save button	Appointment should get saved successfully
	Verify time ,Stylist on	Appointment should get saved with the
8	Appointment	entered time ,Stylist

Verify already booked time slot not selectable when making Appointment

Test case 36 for Haircut

Pre-

condition User should logged into the system ,Execute test case 34

Test case ID	Steps	Expected results
1	Go to Make Appointment tab	-
2	Select the same date from Calendar on Test case 35	Should be able to select the same date from calendar
3	Select Hair cut option from "For" dropdown list same option on Test case 35	Selected value should get set on for combo box
4	Click on Next button	User will get navigate to Appointment detail view above selected date and option should appear correctly
5	Select the same Stylist on Test case 35 from Beautician drop down list	Selected t stylist should appear on Beautician field
6	Verify time slot booked on test case 35 is not selectable	Time slot booked should be not selectable and should be grey out

Verify Back Buttons

Test case 37 functionality

Pre-

condition User should logged into the system ,Execute test case 34

Test case ID	Steps	Expected results
1	Execute test case 34	User should navigate to Appointment Details tab
2	Click on Back button	User should get navigate to Make Appointment tab

Verify Appointment

Test case 38 History

Pre-

condition User should logged into the system ,Execute test case 34

Test case ID	Steps	Expected results
110	Берз	DAPCECU TESUIES
1	Execute test case 34,35	-
		User should navigate to Appointment History
	Go to Appointment History	tab
2	tab	
	Verify appointment details	
	Date ,Time ,For ,Stylist,	Date ,Time ,For ,Stylist, Status on each
3	Status on each appointment	appointment should be accurate

Test case 39 Verify Cancel Appointment

Pre-

condition User should logged into the system ,Execute test case 38

Test case ID	Steps	Expected results
1	Execute test case 34,35,38	-

2	Go to Appointment History tab	User should navigate to Appointment History tab
3	Click on Cancel status on a specific appointment	Appointment should get cancelled successfully
4	Verify status of the appointment gets changed to cancel	Status of the appointment gets changed to cancel

Verify Time slot for Appointment

Test case 40 Appointment

Pre- User should logged into the condition system ,Execute test case 34

Test case ID	Steps	Expected results
	_	_
1	Execute test case 34	-
		10 time slots should be available
2	Verify time slot values	

Test case 41 Verify adding Feedback

Pre-

condition User should logged into the system

Test case ID	Steps	Expected results
1	Go to Feedback tab	Feedback form should be loaded
	Enter feedback heading	
	Should be able to modify the	Feedback heading should be inserted
2	entered feedback heading	
	Click on Expand tool on	
3	Feedback area	Document editor should get loaded
	Verify adding modifying feed	
	back with text comment	Entered text images should appear on
4	images ect	feedback text area
		Feedback should get added to DB
5	Click on submit button	successfully
	Verify entered feedback not	
	appear on Feedback main tab	Feedback should get listed on feedback main
6	until admin user approves it	tab on website

Verify adding Profile

Test case 42 picture

Pre-

condition User should logged into the system

Test case ID	Steps	Expected results
1	Go to Profile Picture tab	Profile Picture form should be loaded
2	Browse a profile picture and upload it and click on upload button	Profile picture should get added successfully

Verify Send message

Test case 43 functionality

Pre-

condition User should logged into the system

Test case ID	Steps	Expected results
1	Go to Contact us tab	Contact us form should be loaded
2	Enter user name ,Email and message click on send message button	Message should get sent successfully

Module 5 Make an Bridal Appointment

Test case 44 Verify making Appointment for Bridal dressing using calendar

Pre-

condition User should logged into the system

Test case ID	Steps	Expected results
1	Go to Make Appointment tab	-
2	Select the date from Calendar	Should be able to select the date from calendar
3	Select Bridal dressing option from "For" dropdown list	Selected value should get set on for combo box
4	Click on Next button	User will get navigate to Appointment detail view above selected date and option should appear correctly
5	Select the Stylist from Beautician drop down list	Selected t stylist should appear on Beautician field

6	Select Required time slot one or many	One or many time slot should be selected
7	Click on Save button	Appointment should get saved successfully
8	Verify time ,Stylist on Appointment	Appointment should get saved with the entered time ,Stylist

Test case 45 Verify making Appointment for Bridal dressing entering date

Pre-

condition User should logged into the system

Test case ID	Steps	Expected results
	Go to Make Appointment	
1	tab	-
2	Enter date from keyboard	Should be able to select the date from calendar
	Select Bridal dressing option	Selected value should get set on for combo
3	from "For" dropdown list	box
		User will get navigate to Appointment detail
		view above selected date and option should
4	Click on Next button	appear correctly
	Select the Stylist from	Selected t stylist should appear on Beautician
5	Beautician drop down list	field
	Select Required time slot one	
6	or many	One or many time slot should be selected
7	Click on Save button	Appointment should get saved successfully
	Verify time ,Stylist on	Appointment should get saved with the
8	Appointment	entered time ,Stylist

Verify already booked time slot not selectable when making Test case 46 Appointment for Bridal dressing

Pre-

condition User should logged into the system ,Execute test case 34

Test case ID	Steps	Expected results
	Go to Make Appointment	
1	tab	-
2	Select the same date from Calendar on Test case 45	Should be able to select the same date from calendar
3	Select Bridal dressing option from "For" dropdown list same option on Test case 45	Selected value should get set on for combo box

		User will get navigate to Appointment detail view above selected date and option should
4	Click on Next button	appear correctly
	Select the same Stylist on	
	Test case 35 from Beautician	Selected t stylist should appear on Beautician
5	drop down list	field
	Verify time slot booked on	Time slot booked should be not selectable and
6	test case 35 is not selectable	should be grey out

Verify Back Buttons Test case 47 functionality

Pre-

condition User should logged into the system ,Execute test case 44

Test case ID	Steps	Expected results
1	Execute test case 44	User should navigate to Appointment Details tab
2	Click on Back button	User should get navigate to Make Appointment tab

Test case 48 Verify Appointment History

Pre-

condition User should logged into the system ,Execute test case 34

Test case ID	Steps	Expected results
1	Execute test case 44,45	-
		User should navigate to Appointment History
	Go to Appointment History	tab
2	tab	
	Verify appointment details	
	Date ,Time ,For ,Stylist,	Date ,Time ,For ,Stylist, Status on each
3	Status on each appointment	appointment should be accurate

Test case 49 Verify Cancel Appointment

Pre-

condition User should logged into the system ,Execute test case 38

Test case		
ID	Steps	Expected results

1	Execute test case 44,45,48	-
		User should navigate to Appointment History
	Go to Appointment History	tab
2	tab	
	Click on Cancel status on a	Appointment should get cancelled
3	specific appointment	successfully
	Verify status of the	
	appointment gets changed to	Status of the appointment gets changed to
4	cancel	cancel

Test case 50 Verify Time slot for Appointment

Pre- User should logged into the condition system ,Execute test case 44

Test case ID	Steps	Expected results
1	Execute test case 44	-
		6 time slots should be available
2	Verify time slot values	

Test case 51 Verify Appointment detail report

Test case ID	Steps	Expected results
12	Seeps .	Expected results
1	Execute test case 34-39	Appointment should be booked and cancelled
	Go to admin panel Report	
2	center ->Appointment report	Go to Appointment Report
	Verify filters Beautician	
	,Date,Serivices,Appointment	
3	status	Report should display selected details only
	Click on submit button and	
4	print report	Report should be printed in pdf successfully
	Verify data on report -	
	Beautician	
	,Date,Serivices,Appointment	
5	status	All details should be accurate

Test case 52 Verify Cancel Appointment through admin panel

Test case ID	Steps	Expected results
1	Execute test case 44,45,48	-

		User should navigate to Appointment History tab
2	Go to Appointment report	
	Click on Cancel status on a	Appointment should get cancelled
3	specific appointment	successfully
	Verify status of the	
	appointment gets changed to	Status of the appointment gets changed to
4	cancel	cancel

Test case 53 Verify Complete Appointment through admin panel

Test case ID	Steps	Expected results
1	Execute test case 44,45,48	_
		User should navigate to Appointment History tab
2	Go to Appointment report	
3	Click on Complete status on a specific appointment	Appointment should get changed to completed status successfully
4	Verify status of the appointment gets changed to complete on client profile	Appointment should get changed to completed status successfully on client profile

Appendix B – Use Case Diagram Use Case Diagram

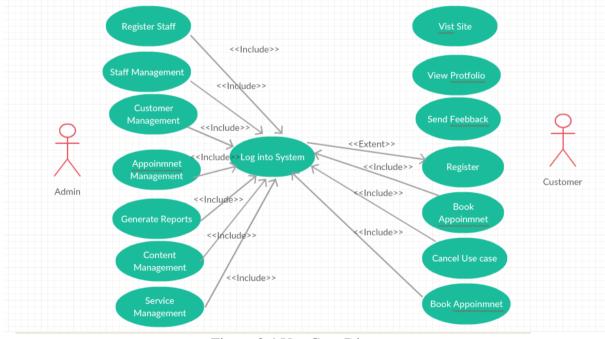


Figure 3.4 Use Case Diagram

Activity Diagram

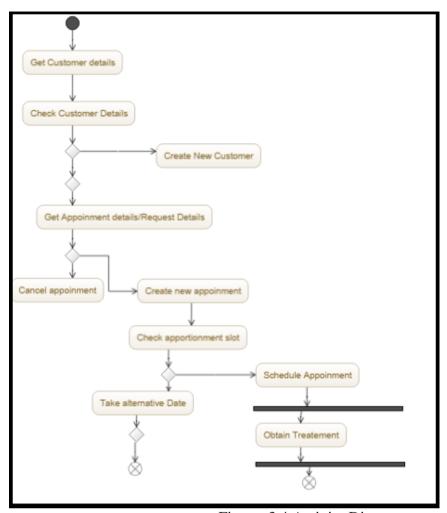


Figure 3.4 Activity Diagram

Sequence Diagram

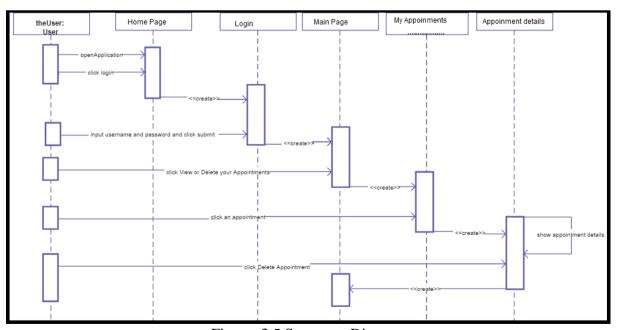


Figure 3.5 Sequence Diagram

Appendix C – UI Design

Home page

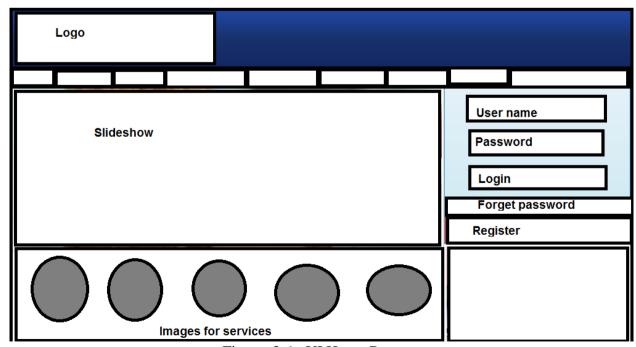
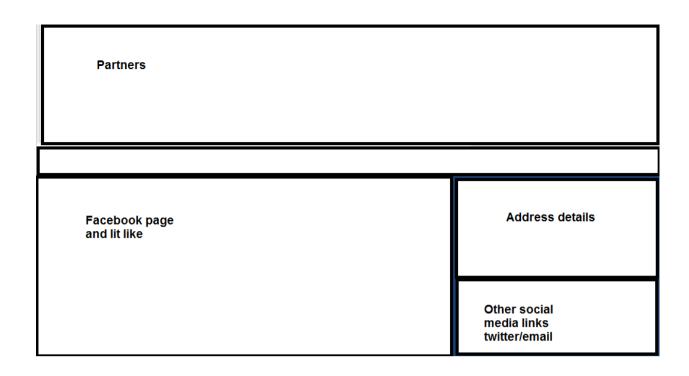


Figure 3.6 - UI Home Page



Member Registration

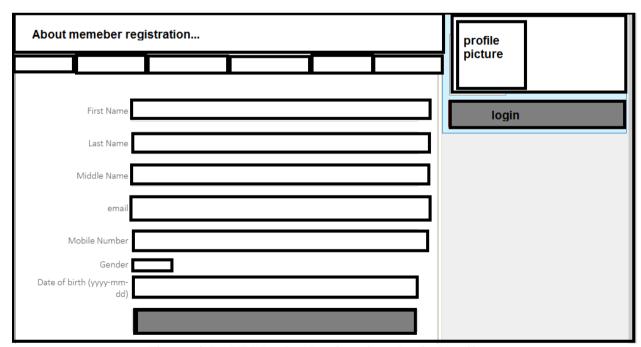


Figure 3.7 - UI Member Registration- Basic Details

Add contact details



Figure 3.8 UI Add contact details

Make appointment



Figure 3.9 UI Make appointment

Appointment history

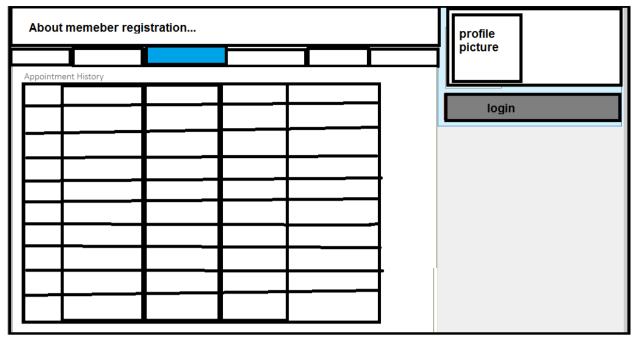


Figure 3.10 UI Appointment history

Feedback form

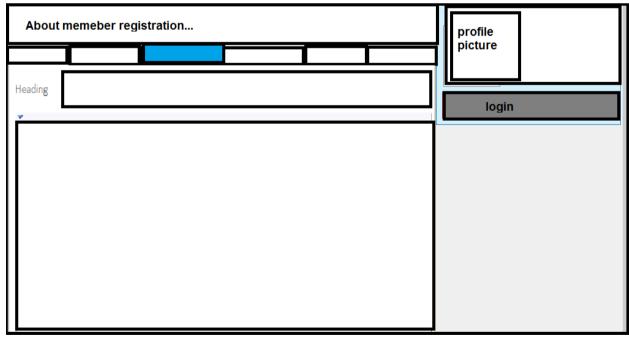


Figure 3.11 UI Feedback form

Profile picture

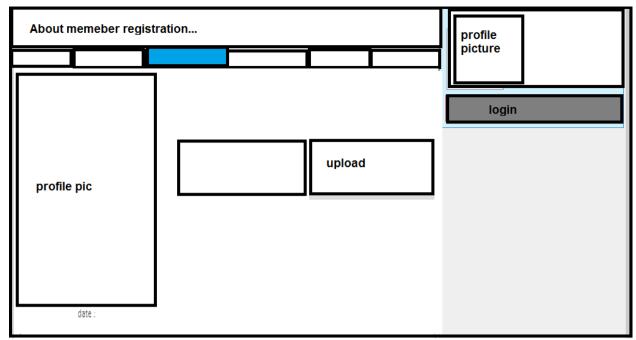


Figure 3.12 UI Profile picture

About Us

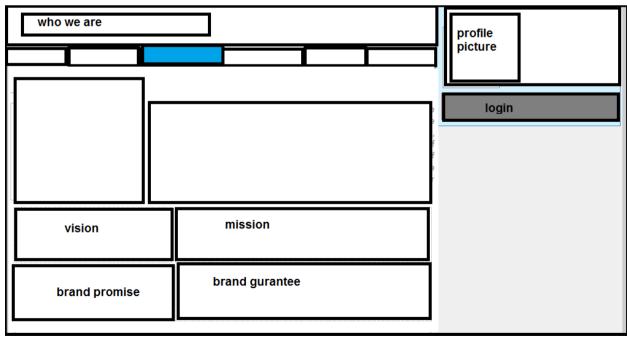


Figure 3.13 UI About Us

Our services

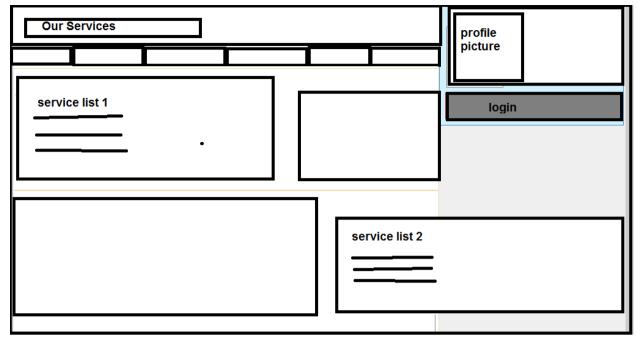


Figure 3.14 UI Our services

Contact us

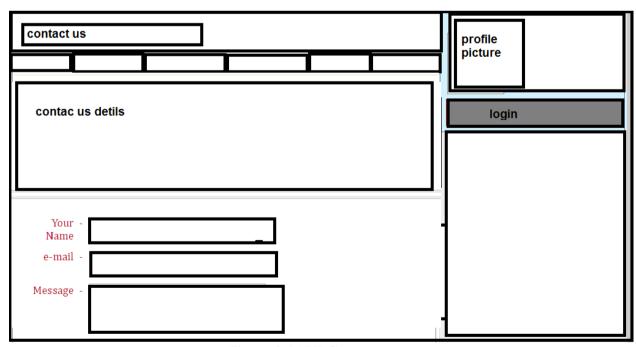


Figure 3.15 UI Contact us

Administration panel

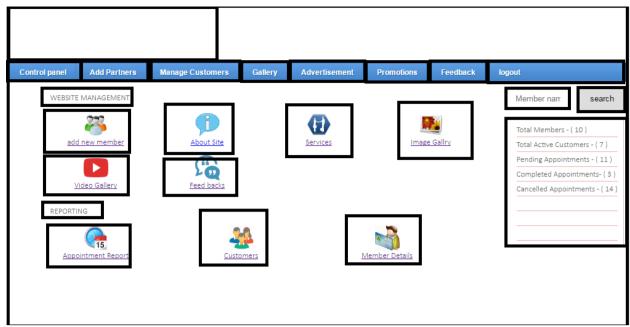


Figure 3.16 UI Administration panel

Reports Active Customers

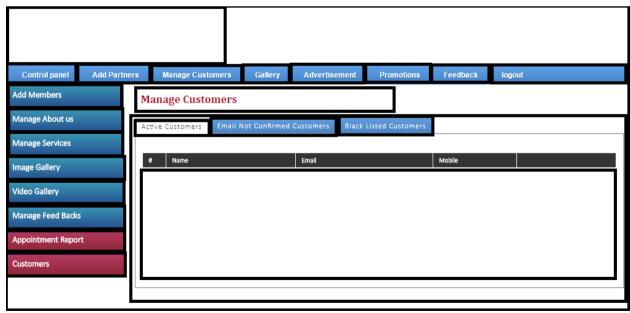


Figure 3.17 UI Reports - Active Customers

Email not confirmed customers



Figure 3.18 UI Reports - Email not confirmed customers

Black listed customers

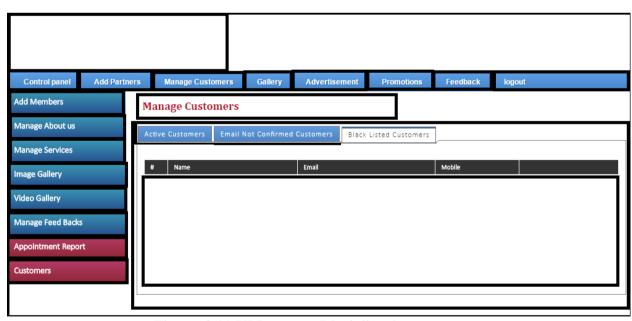


Figure 3.19 UI Reports - Black listed customers

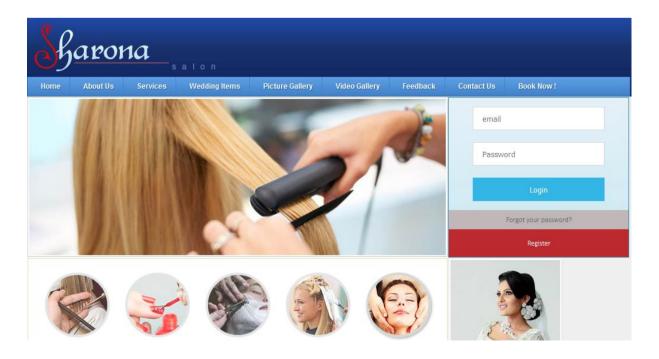
Appointment Report



Figure 3.20 UI Reports - Appointment Report

Appendix D – User Manual

1) Home page



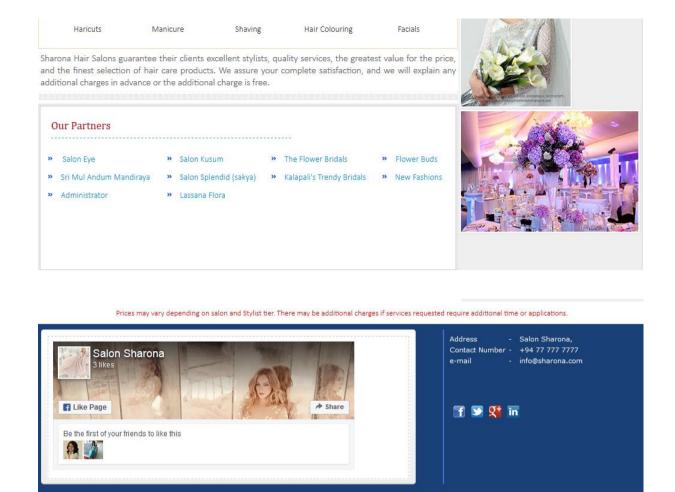


Figure 4.11 Home Page

Home | About Us | Sevices | Wedding Items | Picture Gallery | Video Gallery | Feedbacks | Register | Contact's All Right Reserved . 2013 MIT . University Of Colombo School Of Computing.

Home page is designed to navigate as one page website. All informational tabs will be navigated through this main page. Book Now tab will be redirected to registration page.

2) Book Now Page

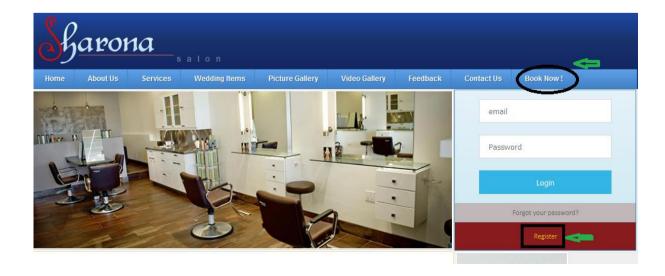


Figure 4.12 Book Now Page

When user need to make an appointment first the user need to get log into system or user need to get register. When click on "Book Now" tab on homepage, it will redirect to be below page. If you already have an account you can logged in the system using your credentials. If you forgot your password, you can get that to your email address by click on "Forget your password?" tab.

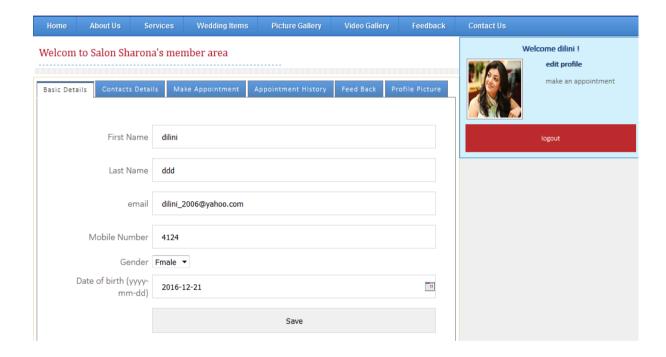


Figure 4.13 Registration Form

3) Registration page

Use need to enter basic details to get registered into system and also there will be email validation process

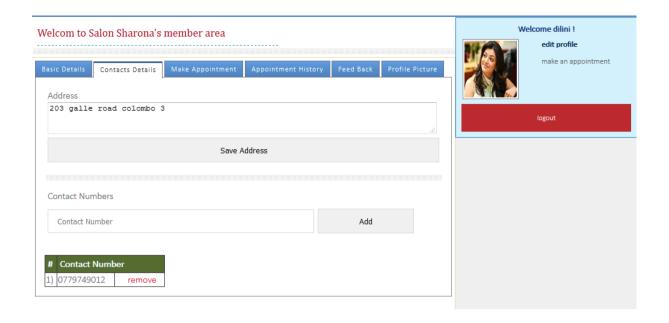


Figure 4.14 Enter Basic Details

4) Make appointment

After Login into system use can book an appointment on below panel

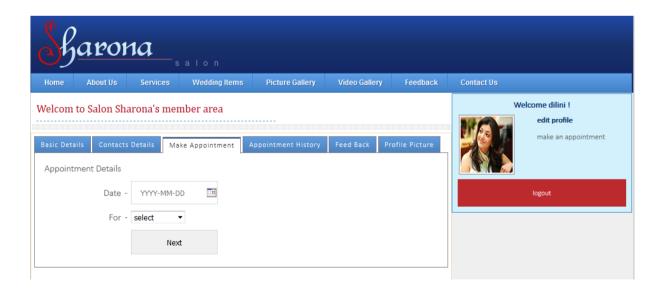


Figure 4.15 Make Appointment

Required date can be selected from the calendar view or user can enter the required date manually .After setting the date user need to set the service using the "For" Dropdown list as shown on below screenshot

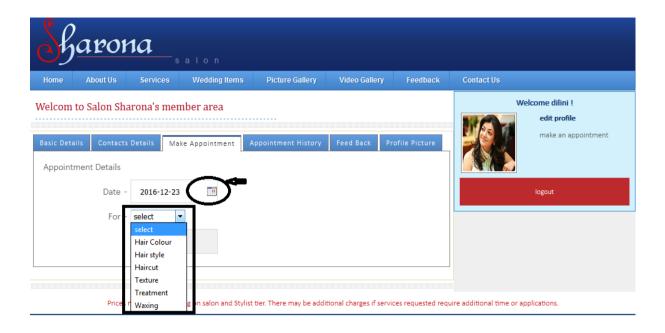


Figure 4.16 Select Appointment Date

After setting date and service type user will be directed to new page as below. Here previously selected details will appear (date and service). User need to select the stylist from the drop down list depending on there wiliness

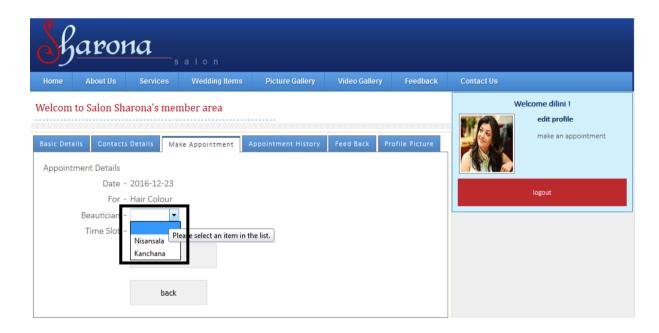


Figure 4.17 Select Stylist

Once user select the stylist his /her available time slots will be displayed as below .Each day there will be 10 time slots for a Stylist and use can select one or more time slots if required

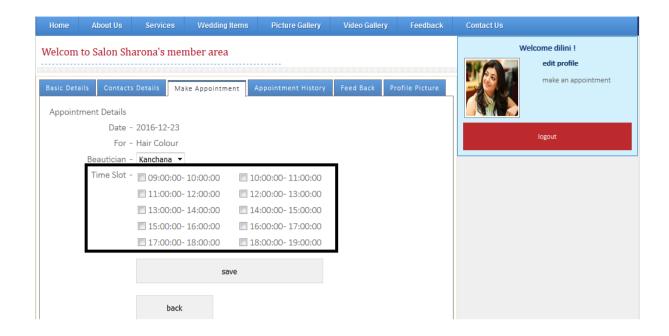


Figure 4.18 Time slot Availability

Already booked time slots will be displayed by gray out the selection so that user will not be able to book a time slot which is already booked previously .Below screenshot shows a 9.00-10.00 time slot has been already booked and user will not be able to selected it

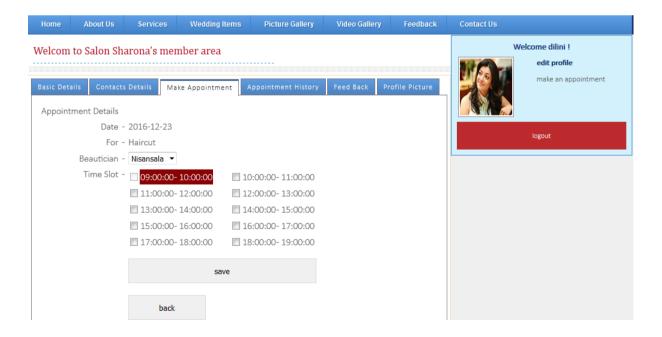


Figure 4.19 Booked Time slot

use can select one or more time slots if required as shown below

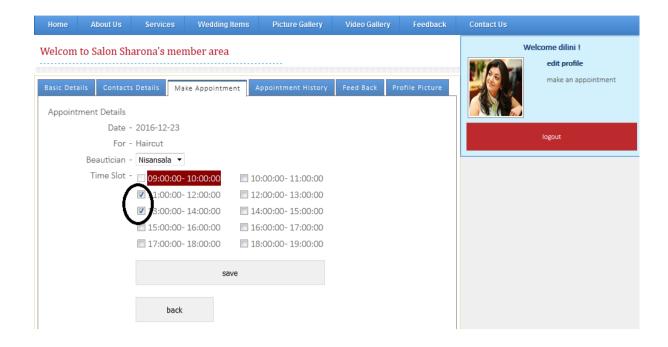


Figure 4.20 Multiple selection of time slots

Appointment history of a specific customer can be viewed through Appointment History. User can cancel the appointments by clicking on the cancel link as shown below

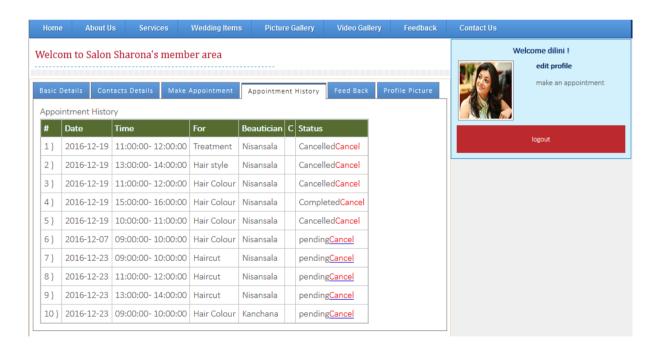


Figure 4.21 Appointment History

Any login user can add their feedback using below panel. And it will get displayed on the website on feedback panel once the admin user approves it from Admin Module



Figure 4.22 Add Feedback

Toolbar will be provided on Feedback panel to Add/Modify entered Feedback ,Using this tool bar use can insert images /text ect..

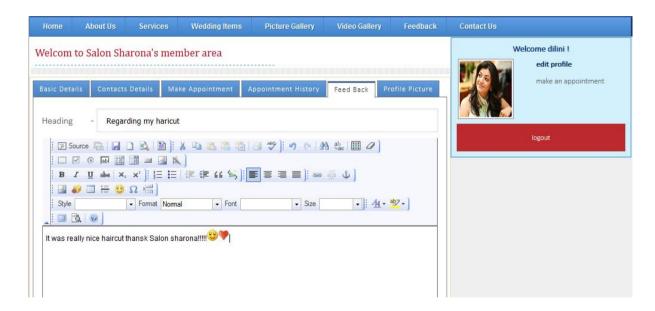


Figure 4.23 Toolbar to add Feedback

Further registered user can add Profile pictures to his/her account through Profile Picture tab.

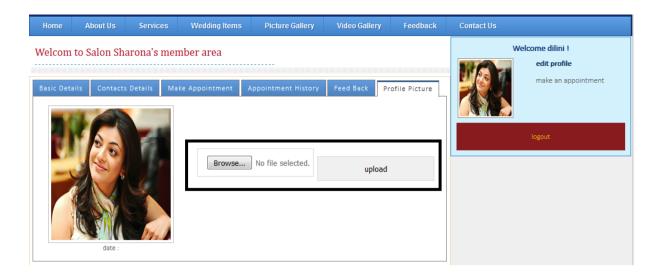


Figure 4.24 Add Profile Picture

User need to log out from his /her account using Logout option which is highlighted on below screenshot



Figure 4.25 Logout function

5) About Us Page

This website is used as a promotional and administrative tool .There for the Sharon salon details can be viewed by any user as no login is required .User can access About Us, Services ,Weeding Items ,Picture Gallery,Vedio Gallery ,View Feedback and Contact Us panels

Below is a screenshot of About Us page and Companies vision mission will be displayed in here



Figure 4.26 About Us page

6) Services Page

This page will display the available services at salon Sharona as below .User can check all available services at once by using the below page

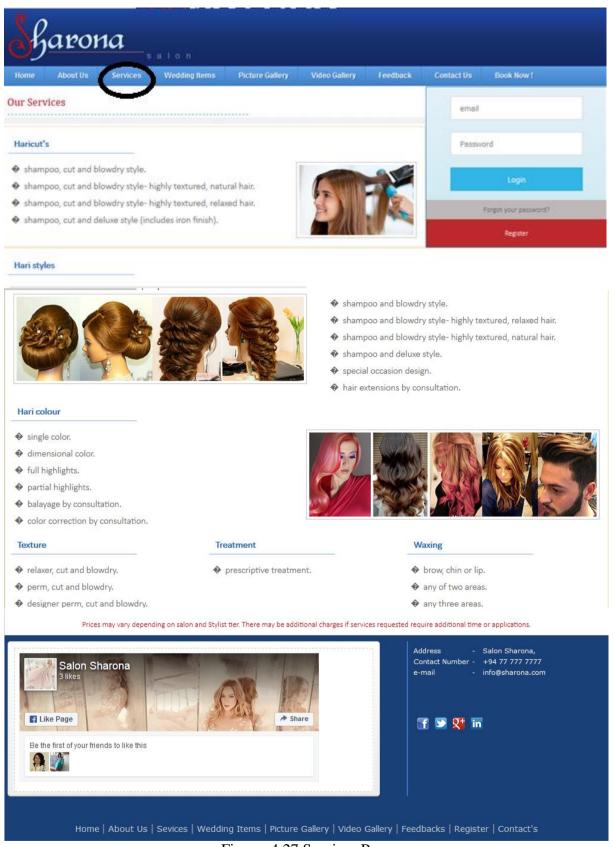


Figure 4.27 Services Page

7) Wedding Items

This page is used as a promotional page where the company can gain some income by publishing the vendor /Business partner details in here .Further any customer can view and search the required service using the City filter .Below screenshot shows the available weeding items once use select any item user will be directed to a new page

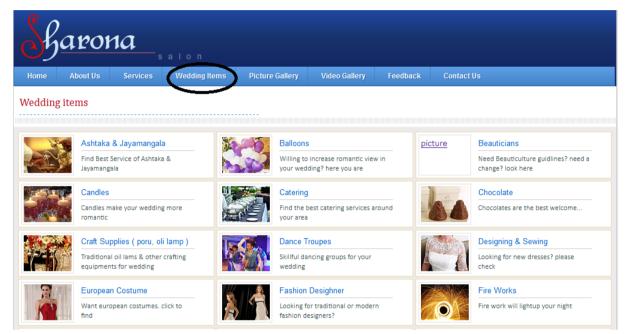


Figure 4.28 Wedding Items

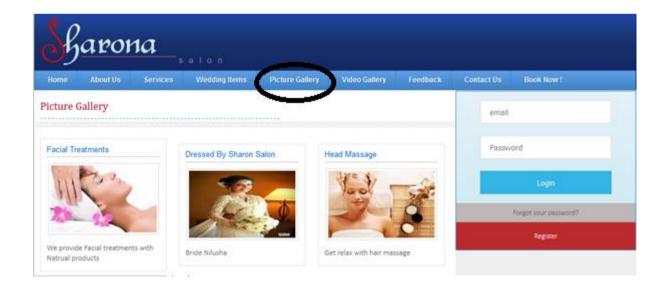
Once user click on and wedding item above below page will be redirected. Inhere user can enter the required City you are looking for and get filter details as required Below are the available beauticians for All Cities .User can view there work using slide show or using the Thumbnail Pictures



Figure 4.29 Service by City

8) Picture Gallery Page

Pictures of salon Sharona will be displayed on below page



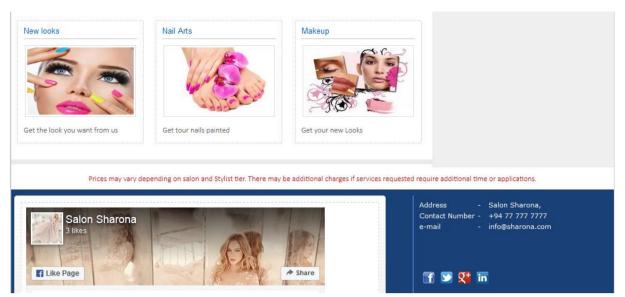


Figure 4.30 Picture Gallery

9) Video Gallery Page

Videos of salon Sharona will be displayed on below page

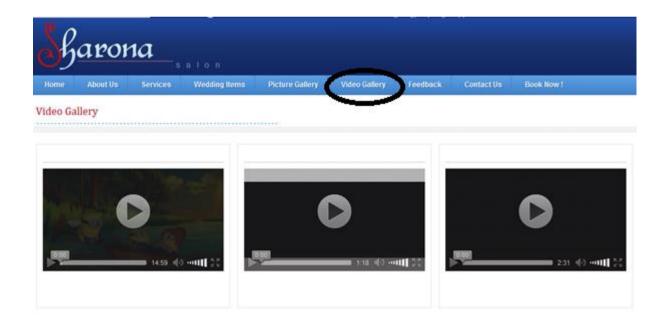




Figure 4.31 Video Gallery

10) Feedback Page

User feedback can be viewed from below page

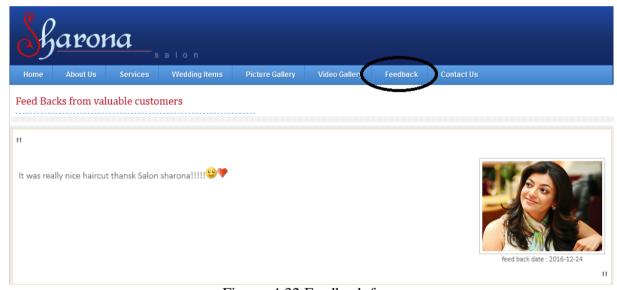


Figure 4.32 Feedback form

11) Contact Us Page

User can send message through below page

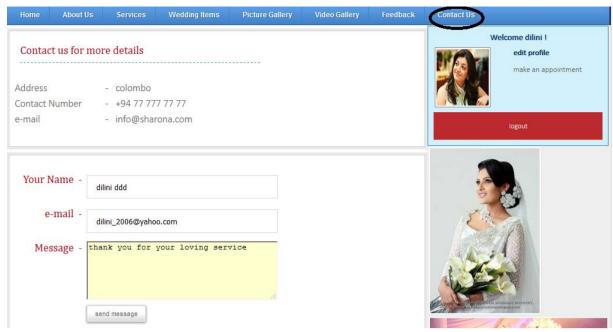


Figure 4.33 Contact Us Form

12) Administrative panel

This will be used to manage the work on Salon Sharona. One responsible use will be assigned for this and this panel can be accessed using below link. User name and Password is required to get log into this Administrative panel

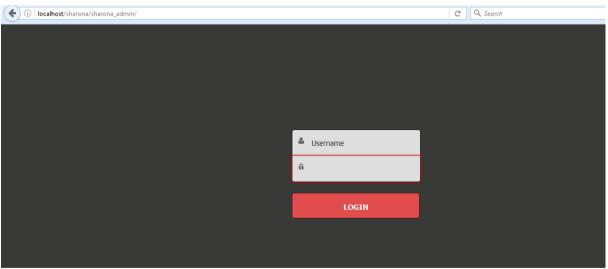


Figure 4.34 Admin Panel Login

Once log into Administrative panel below page will be redirected Mainly there are two parts Website Management and Reporting .On the right hand side there will be a summary of appointments as highlighted below .Content Management of the website will be handled

through the panels on Website Management section .Add new Member ,About Site ,Service ,Image Gallery,Vedio Gallery ,Feedbacks panels will be used in this

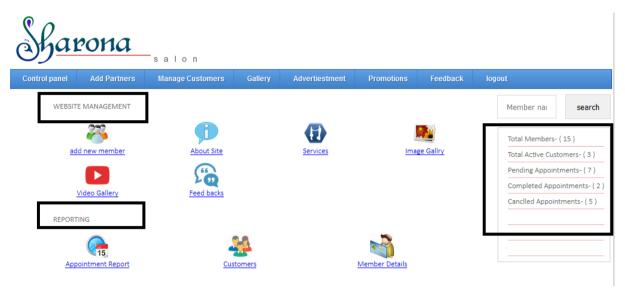


Figure 4.35 Administrative panel view

13) Reports

Following reports will be available on this Administrative Panel.

I. Appointment Report

All booked appointments can be viewed at once using the below report. Further below filtering criteria's are available to filter result. Stylist ,Date of Appointment ,Services , Appointment Status .Further use can gets pdf print of this report using this panel



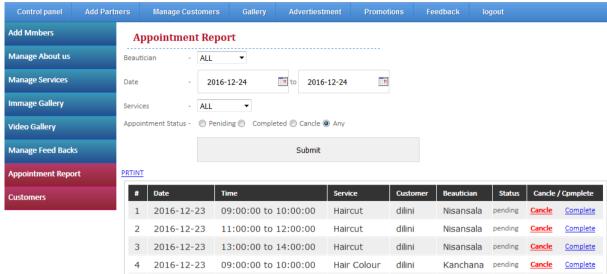


Figure 4.36 Appointment Report

II. Active Customers

All Active customers can be viewed using the below panel

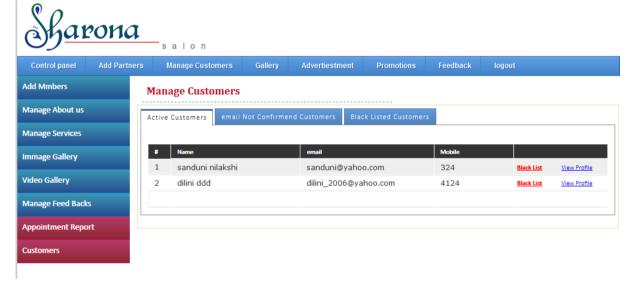


Figure 4.37 Active Customers

III. Email not confirmed Customers

All customers who have not confirmed there emails while registering will be available on below panel

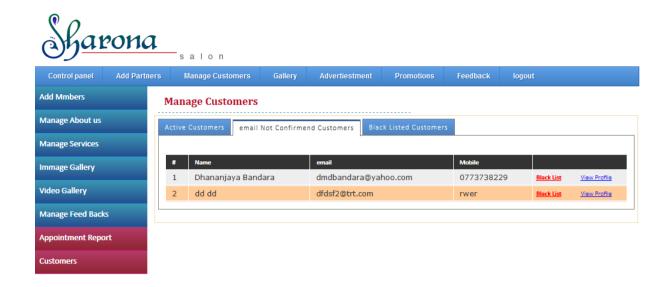


Figure 4.38 Email not confirmed Customers

IV. Black Listed Customers

List of all blacklisted customers can be viewed using the below panel

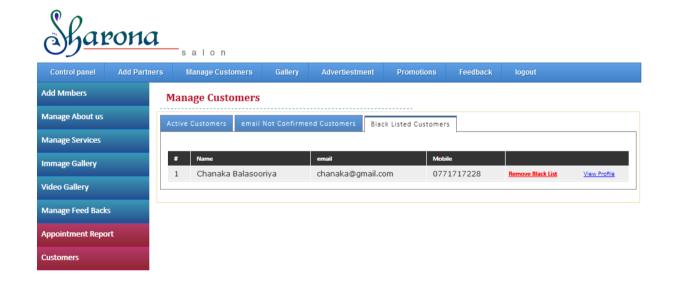


Figure 4.39 Black Listed Customers

Appendix E – Web based Survey Questionnaires

Below are the screenshots of Web based Survey question forms

Review for Salon Sharona website		
Review for Salon Sharona website:This sample questionnaires has been created for analyse the customer /staff feedback on the website		
1. What is your age?		
18 to 24		
25 to 34		
35 to 44		
45 to 54		
55 to 64		
65 to 74		
75 or older		
Figure 4.40 Questionaries' 1		
Are you a Staff member of saloon or Are you a Customer of the salon?		
○ Staff Member		
Customer		
Customer		
3. If you are a staff member whats your Designation?		
3. If you are a staff member whats your Designation?		
3. If you are a staff member whats your Designation? Senior Stylist		

3. If you are a staff member whats your Designation?		
Senior Stylist		
Unior Stylist		
Training Stylist		
4. At Which rate do you rate the system?		
Poor		
Reasonable		
Average		
Good		
Excellent		
Done		

Figure 4.41 Questionaries' form part 11