ONLINE PRE-SCHOOL MANAGEMENT SYSTEM FOR URUMPIRAI KIDS' PARK

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This dissertation is submitted in partial fulfilment of the requirement of the Degree of Bachelor of Information Technology (external) of the University of Colombo School of Computing

DECLARATION

(Name of Supervisor)

DECLARATION

I certify that this dissertation does not incorporate, without acknowledgement, any material previously submitted for a degree or diploma in any university and to the best of my knowledge and belief, it does not contain any material previously published or written by another person or myself except where due reference is made in the text. I also hereby give consent for my dissertation, if accepted, to be made available for photocopying and for interlibrary loans, and for the title and abstract to be made available to outside organizations.

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ABSTRACT

Jaffna is the major education city of the Northern Province of Sri Lanka. Kids' Park is one of the best model preschool in Jaffna district which has several branches located around the Jaffna Peninsula. They provide best education for children from the ages of infancy until six. It has specially trained preschool teachers and facilitate each child's learning through continuous observation and assessment.

"Kid's Park" still keeps their records manually and faces many difficulties when using manual system. This system is generally very bulky both to handle and to store. The details of the students are recorded when students are admitted to the preschool in record books. Details of staff are gathered each time a new staff is appointed, these details are kept in record books. With that, every time the details are updated. Changes of address, telephone numbers and other changes are not updated in manual procedure.

The purpose of the project is to provide an efficient and effective online system to Kids' Park to manage their details of students, staff and handle the payments process. With the help of this online system parents can easily see their student progress and maintain their relationship with the school. The administrator can also handle the admission processes, manage the registered details of students and staff.

This Online Pre-school management system has mostly been developed using some modern open sourced tools and software. PHP which is a powerful server side scripting language has been used for server side scripting along with the Apache web server and MySQL which is a relational database management system. The developed system has been properly tested using a comprehensive testing procedure which ensures a high-quality system.

ACKNOWLEDGEMENT

I have taken efforts in this project. However, it would not have been possible without the kind support and help of many individuals. I would like to extend my sincere thanks to all of them.

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Foremost, I wish to express my deepest gratitude to the director and staff of the Urumpirai Kids' Park who granted me permission to undertake the software project and providing necessary information regarding the project and also for their support in completing the project.

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LIST OF ACRONYMS

HTML – Hypertext Markup Language

PHP – Hypertext Preprocessor

CSS – Cascading Style Sheets

SQL – Structured Query Language

SMS – Short Message Service

CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

Jaffna is the major education city of the Northern Province of Sri Lanka. Kids' Park is one of the best model preschool in Jaffna district which has several branches located around the Jaffna Peninsula. They provide best education for children from the ages of infancy until six. It has specially trained preschool teachers and facilitate each child's learning through continuous observation and assessment.

1.2 MOTIVATION

Preschool education focuses on educating children from the ages of infancy until six. Kids' Park is one of the famous model preschool in Jaffna district which has several branches located around the Jaffna Peninsula. It has specially trained preschool teachers and facilitate each child's learning through continuous observation and assessment. It also manages the evening courses for kids such as CALSDA, Art and Design, etc.

"Kid's Park" still keeps their records manually and faces many difficulties when using manual system. The details of the students are recorded when students are admitted to the preschool in record books. Details of staff are gathered during the appointment to the preschool in record books and kept. With that, every time the details are updated. Changes of address, telephone numbers and other changes are not updated in manual procedure.

Windows based or web based management systems are suitable to manage this preschool but geographic location of the branches and users are different, so the web based system is most suitable. The system is planned to be developed using Open Source tools, such as PHP& MySQL to build the system and HTML, CSS, JavaScript and AJAX for designing and validation.

The purpose of my project is to provide an efficient and effective online system to Kids' Park to manage the details of students and staff and handle the payments process.

With the help of this online system parents can also see their student progress and maintain their relationship with the Preschool. The Administrator (Director) can also handle the admission processes, manage the registered details of students and staff easily.

1.3 OBJECTIVE OF THE PROJECT

Preschool administration can be able to:

- Manage the details of student and staff and maintain up-to-date information.
- Manage students' attendance. If a student is absent system automatically check with parents' report and alert them via sms.
- Manage staff leave with director or branch head approvals.
- Create staff's monthly salary report.
- Manage students' event, class payment details.
- Teachers can enter their students' marks and their extracurricular activities and easily generate the student's report.
- Manage events organized by the school and can convey event details to the parents.
- Easy to communicate with system users through message (SMS).
- Generate daily, monthly, annual and timely report with print option.

Parents can be able to:

- Find their students' overall performance including their extracurricular activities.
- Easily inform through absent report about the absent of the particular student to School.
- Manage their event or monthly payment details.
- Easy to communicate with teachers or administration of the school through message (SMS).

1.4 SCOPE OF THE PROJECT

The scope of this project is to develop an online Preschool management system for Kids' Park, which support the core functioning of managing details of students and

staff, students attendance, staff leave, salary and student payment in order to carry out the administration effectively and efficiently.

1.5 CRITICAL FUNCTIONALITY FOR PROJECT

- The users who lack knowledge of information technology may face some problem using this system.
- All users may not have internet facilities at their location.
- Initial cost may be expensive for the client.

1.6 STRUCTURE OF THE DISSERTATION

This dissertation will describe about this project as follows. The structure of dissertation: The introduction is discussed in the chapter1, chapter 2 talks about analysis; in this chapter2 we discussed about how we analysed the problem and list down the functional and non-functional requirements. Chapter 3 talks about design; how the user interact with system and is shown by diagram. Chapter 4 talks about implementation; how the system modules and structure and chapter 5 talks about testing, how to evaluate the system with details study. Chapter 6 is about conclusion; appendix is annexed additional document about this project and finally glossary is included.

CHAPTER 2: ANALYSIS

System Analysis is an important phase of the software development lifecycle. System analysis as a problem-solving technique that breaks down a system into its component pieces for the purpose of the studying how well those component parts work and interact to accomplish their purpose. This chapter deals with the present situation of the "Urumpirai Kids' Park". It based on the gathering techniques used to gather problems of current manual system of the institute and achieve the project goal. Finally we will compare the existing system with the functional and non-functional requirement of the proposed system.

2.1 EXISTING MANUAL SYSTEM

Urumpirai Kids' Park management system is still managed manually. So, this system contains human errors and data redundancy.

Use-case diagram for existing manual system is shown in the following Figures 2.1:

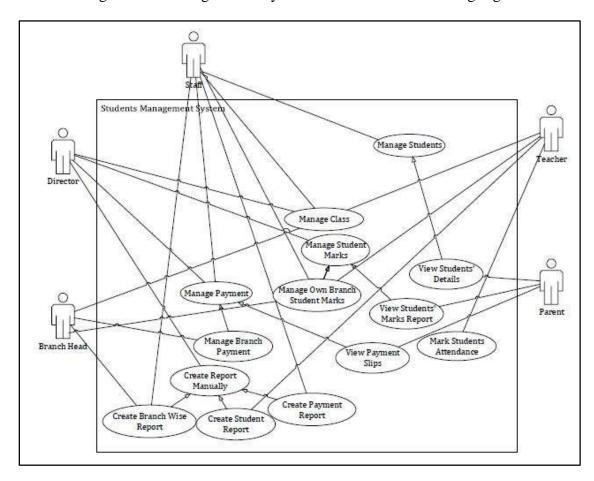


Figure 2. 1: Use-Cases for Student Management System in Existing Manual system

2.2 DRAWBACKS OF EXISTING MANUAL SYSTEM

The following major drawbacks have been identified in the existing manual management system.

- The risk of errors is greater.
- No backups for the confidential data.
- Quality of output is less consistent and often not well-designed.
- Suffering and time wasting with paper works.
- Poor relationship between parents and the management.
- Paper based systems are generally very bulky both to handle and to store, and office space is expensive.
- Collaboration on documents is extremely hard when working with paper versions.

2.3 REQUIRMENT ANALYSIS FOR MANUAL SYSTEM

Preschool management system for Urumpirai Kids' park is done by manually with loads of paper work. Paper is very vulnerable to valuable data being lost. In cases of fire or flood, school systems that rely on paper files are left without a back-up plan; the data is simply destroyed. And everybody's handwriting is different, and what is legible to one person is not always legible to the next.

2.4 REQUIRMENT GETHERING

Requirement gathering or requirement eliciting is the process of addressing the needs and conditions of the new system.

2.4.1 FUNCTIONAL REQUIREMENTS

A functional requirement document defines the functionality of a system or one of its subsystems. It also depends upon the type of software, expected users and the type of system where the software is used. Functional user requirements may be high-level statements of what the system should do but functional system requirements should also describe clearly about the system services in detail.

Requirements of the Urumpirai kids' park

- Entering and storing the details of students and staff.
- Kids' park can store and enter their day to day activity details.
- Parents can view their student's performance and attendance.
- Director and staffs can manage class, payment and students marks.
- Director can create and view all kinds of report.
- Manage expenditure.
- Teacher can generate their students' reports.
- Get parents' feedback.
- Make friendly Graphical User Interface (GUI)

2.4.2 NON-FUNCTIONAL REQUIREMENT

Non-functional requirements "in systems engineering and requirement engineering, a non-functional requirement is a requirement that specifies criteria that can be used to judge the operation of a system, rather than specific behaviours."

- Security: It is a very important thing. Only the authorized persons should be allowed to operate the system with their own username and password only.
- Accuracy and consistency: It is very important. In this project there
 exist quite a few functionalities which accuracy is very vital. Entering
 data should be validated by the system.
- Reliability: The system should accurately performs student registration, report generation, manage staff's leave and students' payment.
- User friendliness: It is very important to the success of the system. In this system most of the users related to know basic computer skill.
 Seven though User interfaces should be designed as attractive.
- Portability of the system: This system will work on all the Windows based operating systems well, which are above Windows XP.
- Response time & processing time: Although this was not specified by the users, in general it is needed that the system should give response to the user without much delay.

• Availability: The system are available to users anytime, anywhere, just need a PC and Internet Connection. Also the system work in multiple web browsers like (Chrome, Mozilla, Opera, and Internet Explorer).

2.4.3 RESOURCE REQUIREMENTS FOR PROJECT

Hardware requirements:

- Pentium 4 computer or above.
- Basic printer for report printing.

Software requirements:

For implementation purpose

- Any operating system.
- Any browsers.

For development purpose

- Windows Operating Systems
- XAMPP Sever v2.3.3
- Adobe Dreamweaver CC
- Microsoft Visio 2013
- MySQL Workbench 6.0.8 CE
- CSS
- JavaScript
- MS word
- Adobe Photoshop CS2

Special requirements:

- Internet facility
- Web hosting and domain registration

2.5 FEASIBILITY STUDY FOR THE PROPOSED SYSTEM

Feasibility study is a very process in order to find out the strengths, weaknesses, opportunities and threats of a proposed system to full fill the main requirements. A detailed feasibility study was carried out regarding this system as following facts.

2.5.1 OPERATIONAL FEASIBILITY

The functions of proposed system were analysed to see whether they accomplish the requirements.

2.5.2 TECHNICAL FEASIBILITY

It is a measure of the practicality of a specific technical solution and the availability of technical resources and expertise.

2.5.3 ECONOMICAL FEASIBILITY

The purpose of the economic feasibility assessment is to determine the positive economic benefits to the institute that the proposed system will provide. It includes quantification and identification of all the benefits expected. This assessment typically involves a cost/ benefits analysis.

2.6 LITERATURE REVIEW

This section summarizes various techniques that have been employed closely related with this system. This system has some literature reviews that are on preschool management system. The following similar systems were used for detailed study.

1. KinderCare

KinderCare [1] is using an online web based system. In this system they provide larger amount of their data. They provide online registration, online payment, view all branches and so own. They listed all of their staff. This system is private. The "KinderCare" front page following Figure 2.2 KinderCare:



Figure 2. 2: KinderCare

2. Little Amigos

Little Amigos [2] is using an online an online web based system. They provide online registration, online payment, parents review, and mailing facilities. They listed all of their staff. The "Little Amigos" front page following Figure 2.3 Little Amigos:



Figure 2. 3: Little Amigos

3. Rainbow preschool

Rainbow [3] is using an online web based system. They provide admission contact form, payment form, and their contact details. The "Rainbow preschool" front page following Figure 2.4 Rainbow preschool:



Figure 2. 4: Rainbow preschool

In best of my knowledge, the above three systems are not suitable for Smart Kids Pre-School. Because most of the functionality of Smart Kids Pre-School not available in these given three management systems.

CHAPTER 3: DESIGN OF SOLUTION

In the phase of design the system architecture has been developed. The design phase has been initialized with the required document delivered by the information or requirement gathering phase and map the gathered requirements in the information gathering phase into architecture. This architecture defines the components, their interfaces and behaviours of that particular newly developing system. The architecture is describes a plan of the system using by diagrams.

3.1 DEVELOPMENT METHODOLOGY

The Software Development Methodology (SDM) to be used in this project is the Software Development Life cycle (SDLC). Where there is a structured set of activities required to develop a software system required to develop a software system.

- Specification
- Design
- Validation
- Evolution

3.1.1 WATERFALL MODEL

Waterfall model is an example of Sequential model. In this model, the software development activity is divided into different phases and each phase consists of series of tasks and has different objectives. The water fall is shown in the following Figure 3.1: Waterfall model

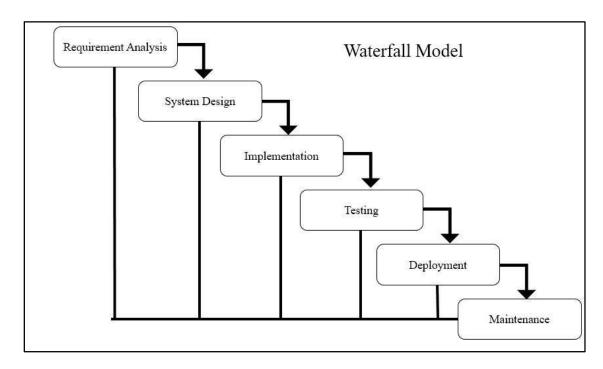


Figure 3. 1: Waterfall model

- Requirement analysis: The first phase involves understanding what
 you need to design and what is its function, purpose etc. All possible
 requirements of the system to be developed are captured in this phase
 and documented in a requirement specification doc.
- **System Design:** The requirement specifications from first phase are studied in this phase and system design is prepared. System Design helps in specifying hardware and system requirements and also helps in defining overall system architecture.
- Implementation: With inputs from system design, the system is first developed in small programs called units, which are integrated in the next phase. Each unit is developed and tested for its functionality which is referred to as Unit Testing.
- **System Testing:** All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures.
- **System Deployment:** Once the functional and non-functional testing is done.

• **System Maintenance:** There are some issues which come up in the client environment. To fix those issues patches are released.

3.2 ALTERNATE SOLUTION

In software development all the system basically divided into three categories that are standalone, network based and web based system.

Alternate solutions	Standard alone	Web based	Network based
Access form anywhere	X	V	Limited
Graphical user interface	√	V	√
Multiple users	X	V	V
Find overall management from one place	X	V	Limited
Sharing facilities	X	V	V

Table 3. 1: Alternate Solution

In this system the web based prechool management system for "Kids' park" has branches in various places, they want to access the system in their places. They like to centralized the backend (database) and provide the system to all users in simultaneously. For these reasons based on above Table 3. 1 the institute has decided to develop the system in web based.

3.3 PROCESS DESIGN OF THE SYSTEM

The design gives the solution for requirements analysis, based on this design to develop the system. This design was divided into three stages:

- Database design
- Application architecture design
- Interface design

3.3.1 DATABASE DESIGN

An entity-relationship (ER) diagram is a specialized graphic that illustrates the interrelationships between entities in a database. This is an important phase in the

design process, which helps to design the system structure in a robust manner. By incorporating a transformation process is called normalization. It can then be converted to the physical database.

Normalization

In the field of relational database design, normalization is a systematic way of ensuring that a database structure is suitable for general-purpose querying and free of certain undesirable characteristics such as insertion, update, and deletion anomalies. That could lead to a loss of data integrity.

First Normal Form (1NF)

First Normal form sets the very basic rules for an organized database. These eliminate duplicative columns from the same table. This can be creating separate tables for each group of related data and identify each row with a unique column or set of columns (the primary key).

Second Normal Form (2NF)

Second normal form addresses the concept of removing up locative data. Meet all the requirements of the first normal form. Remove subsets of data that apply to multiple rows of a table and place them in separate tables. Create relationships between these new tables and their predecessors through the use of foreign keys.

Third Normal Form (3NF)

Third normal form goes one large step further meet all the requirements of the second normal form. Remove columns that are not dependent upon the primary key.

After third normal form most of the table mostly avoids the data redundancy, if any additional other normal form will be used. I drew the Entity Diagram by MySQL Workbench 6.0.8 CE. Our system ER diagram shown following Figure 3.2: ER Diagram:

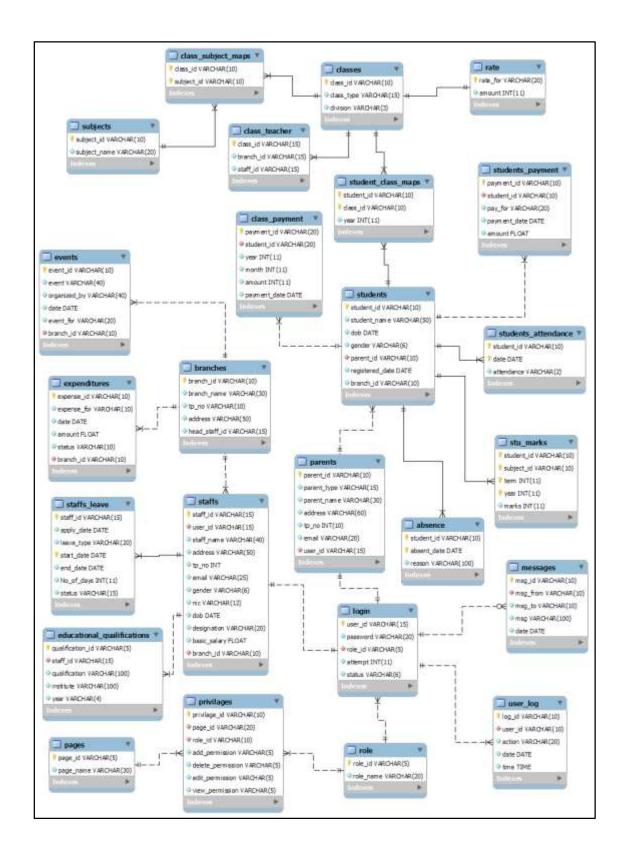


Figure 3. 2: ER Diagram

3.3.2 ARCHITECTURE DESIGN

In this design level, the basic structural framework that identifies the major components of a system and the communications between these components. Below is a general model for the whole system.

Use-case diagram:

Use-case diagram is the simplest that illustrates the user's interaction with the system. It portrays the different type of users in the system and various ways that they interact with the system. We drew use-case diagram for preschool management and student management. Use-case diagram for "Online Pre-school management system for Urumpirai Kids' Park" as follow Figure 3.3 and Figure 3.4

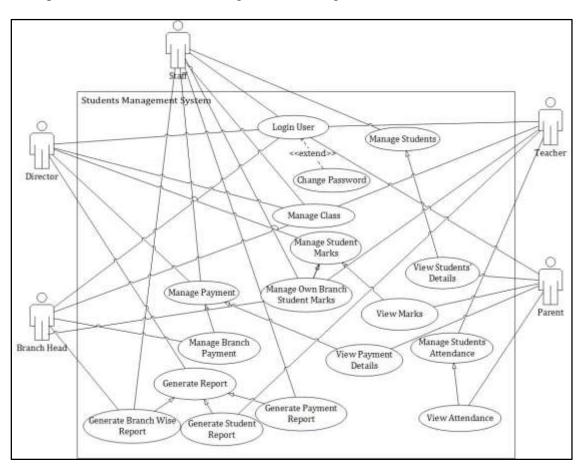


Figure 3. 3: Use case diagram for student management system

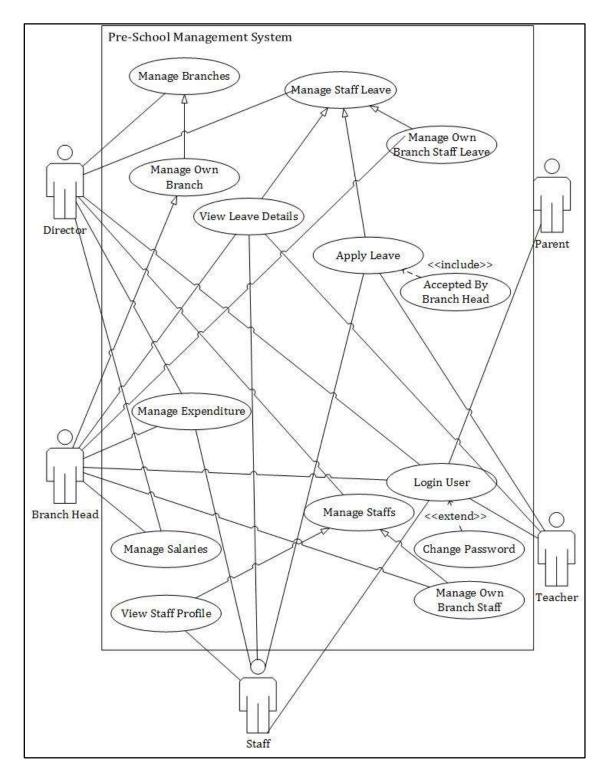


Figure 3. 4: Use case diagram for pre-school management

Use-case	Login User	
Actor	Staff, Director, Branch Head, Parent, Teacher	
Description	Only already registered users can access the system. Others	
	cannot, if they want to access; want register to this system.	
	Registered users when login; system validate the username	
	and password; and authorized that is legal or illegal; if	
	correct authorized user system allowed to access the system.	
Use-case	Manage Class	
Actor	Director, Staff, Teacher, Branch Head	
Description	Manage the class details by director and branch head, others	
	staff and teacher view the class details	
Use-case	Manage Student Marks	
Actor	Director, Staff, Teacher, Branch Head, Parent	
Description	Manage the all the student marks details by director and	
	branch head, others staff and teacher manage their branch	
	student marks details, parents only view his/her children	
	marks details	
Use-case	Manage Leave Details	
Actor	Director, Staff, Teacher, Branch Head	
Description	Manage all the staff leave details by director and branch	
	head manage his/her branch staff leave details, others staff	
	and teacher view his/her leave details and apply for the leave	

Table 3. 2: Use case Narrative

Activity diagram:

This diagram represents the graphical view of workflows of stepwise activities in the system. We drew activity diagram for user login. Refer Figure 3.5.

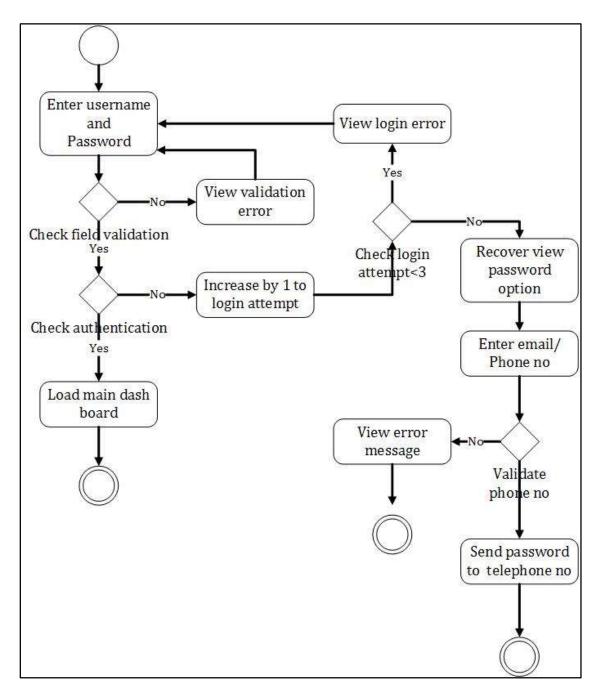


Figure 3. 5: Activity diagram for user login

Sequence diagram:

This diagram represents how objects interact in given situation or activity. I drew sequence diagram for student attendance. Refer Figure 3.6.

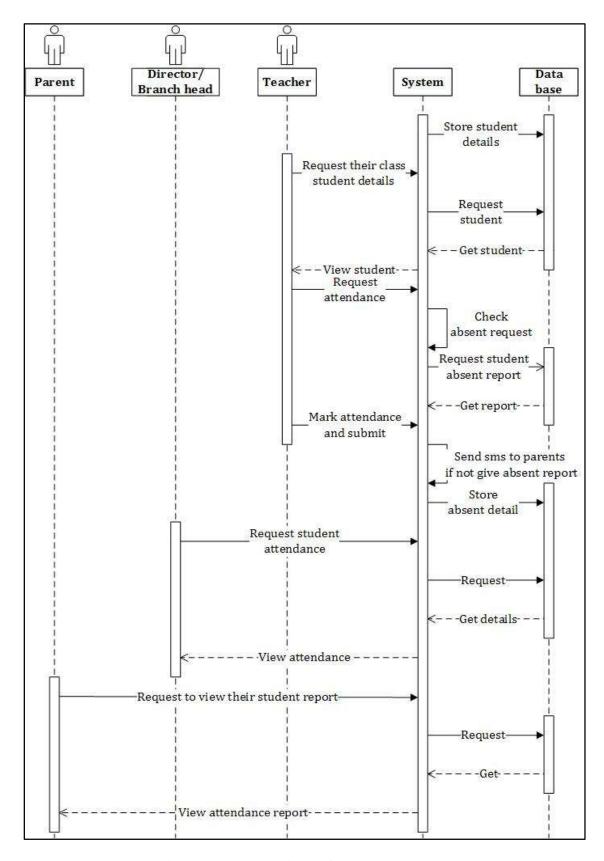


Figure 3. 6: Sequence diagram for student attendance

Date Flow Diagram:

A date flow diagram (DFD) is a graphical representation of the "flow" of data through An information system, modelling its process aspects.

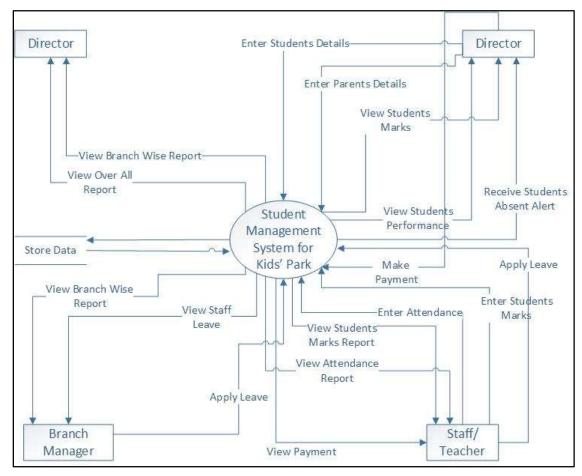


Figure 3.7 Data Flow Diagram for Pre School Management System Level 0

3.3.3 INTERFACE DESIGN

Interface design is the design of the user interfaces for machines and software, such as computers, home appliances, mobile devices, and other electronic devices, with the focus on maximizing usability and the user experience. The goal of user interface design is to make the user's interaction as simple and efficient as possible, in terms of accomplishing user goals [4].

Main User Interfaces

This section makes available for using interfaces of the online pre-school management for Urumpirai kid's park to provide the structure and design of the system. Please refer Appendix C – User Documentation for the rest of the interface designs.

Home Page

The default homepage makes adequate to see about us, events in this institute, gallery, contact details and login to the system. This home page will be changed after a user logged in to the system according to the user type. Refer following Figure 3.8: Home Page.



Figure 3. 8: Home Page

Login Page

This page allows users who are properly registered in this system to login and also this page gives authority for a password if the users find difficult by forgetting their password. Refer Figure 3.9: Login Page.

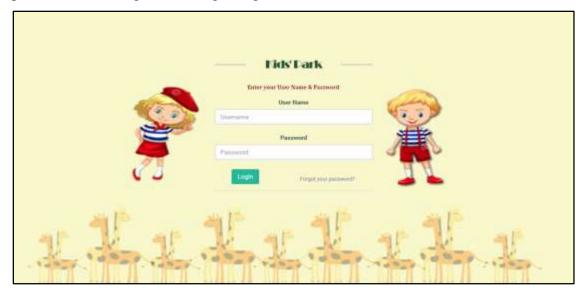


Figure 3. 9: Login Page

Registration Form

Student Registration form of online pre-school management system includes the students personal details. Student id automatically generate in the text box. Refer in Figure 3.10: Student Registration Form



Figure 3. 10: Student Registration Form

Report Generator

This report contains student's detail in class wise. When user select the proper option student's report view on this page. Administrator (Director), branch head and staff are able to print this report. Refer Figure 3.11: Report of students' details – class wise.



Figure 3. 71: Report of students' details – class wise.

After click on the print button that report will be as follow. Refer Figure 3.12.



Figure 3. 82: Print Report

CHAPTER 4: IMPLEMENTATION

An implementation is a realization of a technical specification or algorithm as a program, software component, or other computer system through computer programming and deployment [5]. In this chapter implementation we describe what activities were carried out during the development of our online pre-school management system. After design stage, the result of the design stage is transformed into physical design and we implemented that result of design stage.

For the development and coding PHP and MySQL are basic fundamentals. Some tools such as Notepad ++, Bootstraps are in operation for a development. All coding were designed to produce the system to be most functional in the future.

4.1 IMPLEMENTATION ENVIRONMENT

Hardware	Software
Pentium 4 computer	Wamp/XAMPP Server
Basic printer for printing	Web browser
	Operating System

Table 4. 1: Implement Requirement

Online pre-school management system was developed on a Windows 10 Home Premium computer and to usually compatible with the Windows 8, Windows 7, Windows Vista, and Linux systems such as Ubuntu, Fedora and Red Hat. (Furthermore this system is mostly compatible with any Operating System only tested Operating Systems are mentioned here).

This system was tested under the following screen resolutions on various computers.

- > 1366 x 768 (pixels)
- > 1280 x 768 (pixels)
- > 1024 x 768 (pixels)

Development Tools used for this system development

- ➤ Windows operating system
- ➤ WampServer Version 2.4 for Windows
- ➤ Apache Web Server Version 2.4.4
- ➤ PHP Script Language Version 5.4.16
- ➤ MySQL Database Version 5.6.12
- phpMyAdmin Database Manager Version 4.0.4
- ➤ MySQL Workbench 6.0.8 CE
- ➤ Microsoft Visio 2013
- ➤ Adobe Photoshop Version 14.0
- ➤ Internet Explore/Google Chrome/Mozilla Firefox

Technologies used for development

- MySQL was designed to deal all the development with regard to the database.
- ➤ PHP was the main development language used to develop the main system and its logics.
- ➤ HTML 5 was designed to create the base Interfaces of the system.
- > JavaScript was used to code all the client-side validation.
- ➤ JQuery which is also based on JavaScript was used to implement the pre-coded time picker module, Date Picker module, and password validate.
- ➤ CSS was designed to have the plain HTML 5 interfaces with more attraction and user friendly, which also decided easy to access the system.

4.2 REUSED MODULES AND COMPONENTS

The following pre-coded modules were used while developing the system. **Gentelella - Bootstrap Admin Template [6]** is a cascading style sheet developed by Colorlib which is used for designing of tables and forms. This template is free can download from web. This template is only used for user interface design.

4.3 NETWORK IMPLEMENTATION

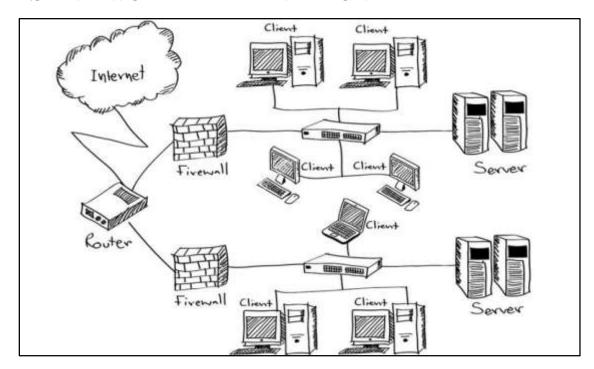


Figure 4. 1: Network implementation

Web applications run on the Web Server. This web based system is accessed through web clients. It could be installed on a web server and a dedicated database server is used to control the system's database. The above Figure 4.1 shows a Dedicated Web server and a Database Server are installed in the institute but public servers also can be used to implement the system. It will reduce much initial cost and maintenance host. Director, branch head, staff, teachers and parents are able to use the system through the Internet connection. To carryout users requirements they need Personnel computer or Laptop with Internet connection without any interruption.

4.4 CODE AND MODULE STRUCTURE

Online pre-school management system has many sub categories. There are student, branch, staff, login and payment. Each category contain following items. (Figure 4.2)

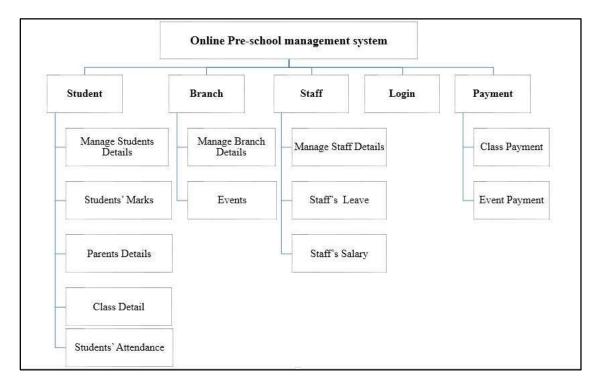


Figure 4. 2: Module Structure

Student management: This system considers about manage students' details, students' marks, parents' details, class details' and students' attendance.

Branch management: This system considers about manage branch details and event.

Staff management: This system considers about manage staff's details, staff's leave and staff's salary.

Login management: This system considers about user login only.

Payment management: This system considers about class payment and event payment.

WAMP Server

WAMP is an acronym for Window, Apache, MySQL, and PHP. This is a software bundle consisting of the before mentioned four software. WAMP server is solid and stable high-performance platform for windows

Gentelella - Bootstrap Admin Template is a cascading style sheet developed by Colorlib used for designing of tables and buttons.

Other Software

Notepad++ was used in designing the website as well as scripting, while phpmyadmin was used as the interface for interacting with MySQL. MySQL was used to create database. Adobe Photoshop was used to create banner and image editing.

The directory of this system is arranged like on Figure 4.3:

lame ^	Date modified	Туре	Size
build	2017-09-03 10:44	File folder	
gallery	2017-10-31 8:50 PM	File folder	
images	2017-11-01 5:42 AM	File folder	
service	2017-11-01 5:57 AM	File folder	
slider	2017-11-01 12:00	File folder	
, temp	2017-09-03 10:44	File folder	
vendors	2017-09-03 10:47	File folder	
about	2017-11-01 6:01 AM	PHP File	3 KB
absence	2017-11-06 5:37 PM	PHP File	10 KB
📗 ajaxpage	2017-11-06 9:31 AM	PHP File	13 KB
🗿 amountajaxpage	2017-10-27 5:06 PM	PHP File	10 KB
attendance	2017-10-30 6:17 AM	PHP File	4 KB
📗 branch	2017-11-05 8:33 AM	PHP File	14 KB
changepassword	2017-11-03 7:53 AM	PHP File	4 KB
class	2017-10-27 11:04	PHP File	12 KB
class_payment	2017-10-27 10:37	PHP File	8 KB
class_subject_maps	2017-10-27 11:08	PHP File	4 KB
classinfo elassinfo	2017-10-27 10:57	PHP File	3 KB
confic confic	2017-11-04 10:04	PHP File	1 KB
contact_us	2017-10-30 10:07	PHP File	2 KB
ducational_qualifications	2017-10-27 5:07 PM	PHP File	13 KB
event	2017-11-06 11:42	PHP File	15 KB

Figure 4. 3: Directory

All core components separated from the style sheets, images and scripts. The Directories are arranged to the appropriate files according their file extension as Figure 4.3.

The functionalities of the index.php, menu.php plus the other pages are explained below Files are separated from images, programming files, CSS, JS. To make the system easily managed by anyone in the future CSS, JS, other tool files are located into the folder named as build.

The important functionalities of the confic.php, login.php, Add form and some other pages are explained below.

Database connectivity

When developing the system, there is a need for database to store the data. Every time when run SQL coding, want to connect database so write a database connection coding in single page (confic.php) and call (include('confic.php')) the connection page when run the

SQL coding.Used the "mysql_connect()" code to connect the local host. After successful of the connection of local host we want to connect the database. We used the "mysql_select_db()" code for connect the database.

Database connection code:

```
<?php
$hostname='localhost'; // host name
$username='root'; // user name
$password="; // password
$dbname='kidspark_db';// db name
$con=mysql_connect($hostname,$username,$password);
if(!$con)
{
    echo "mysql could not connected".mysql_error();
}
$sel=mysql_select_db($dbname);
if(!$sel)
{
    echo "database could not connected".mysql_error();
}</pre>
```

Login to system

This login has to used authenticate the users. When we enter username and password correctly system displays their user interface. If we enter username or password wrong the system will provide a message box with meaningful message. If we enter wrong username or password more than three then systems automatically go to forget password page.

```
$msg="";
if(isset($_POST['btnlogin'])){
    $user_id=$_POST['user_id'];
    $psword=$_POST['psword'];
    $sql1 = "SELECT *
    FROM`login`
```

```
WHERE user_id='$user_id'";
  $result1=mysql_query($sql1)or die("error in login:".mysql_error());
 if(mysql_num_rows($result1)==1){
   $row1=mysql_fetch_assoc($result1);
   $sql2 ="SELECT *
FROM `login`
WHERE user_id='$user_id'
AND password='$psword'";
$result2=mysql_query($sql2)or die("error in login:".mysql_error());
   if(mysql_num_rows($result2)==1){
$_SESSION['user_id']=$user_id;
        $row2=mysql_fetch_assoc($result2);
$role_id=$row2['role_id'];
$usertypesql = "SELECT branch_id
      FROM `staffs`
      WHERE user_id='$user_id'";
      $usertyperesult=mysql_query($usertypesql)or die("error in login:".mysql_error());
        $row3=mysql_fetch_assoc($usertyperesult);
        $branch_id=$row3['branch_id'];
       $_SESSION['role_id']=$role_id;
        $_SESSION['branch_id']=$branch_id;
        $sql3="UPDATE login SET attempt=0 WHERE user id='$user id'";
        $result3=mysql_query($sql3)or die("error in login1:".mysql_error());
        header('location:index.php');
      elseif($row1['attempt']<3){</pre>
        $msg="your password is incorrect, please try again";
        $sql4 ="UPDATE login
        SET attempt=attempt+1
        WHERE user_id='$user_id'";
        $result4=mysql_query($sql4)or die("error in login2:".mysql_error());
```

```
else{
    header('location:forgetpassword.php');
}
else{
    $msg="your userid is not registered in the db";
}
```

New register code

If the user enters all correct information the system insert the details into staff table and student table. If we enter wrong the system provide an alert message box with meaningful message.

New register code:

```
$sqlinsertstudent="INSERT INTO `students`(`student_id`, `student_name`, `dob`, `gender`,
`parent_id`, `registered_date`, `branch_id`)
              VALUES ("".mysql_real_escape_string($_POST['student_id'])."',
              "".mysql_real_escape_string($_POST['student_name'])."',
              "".mysql_real_escape_string($_POST['dob'])."',
              "".mysql_real_escape_string($_POST['gender'])."',
              "".mysql_real_escape_string($_POST['parent_id'])."",
              "".mysql_real_escape_string($_POST['registered_date'])."',
              "".mysql_real_escape_string($_POST['branch_id'])."'
 $resultinsertstudent = mysql_query($sqlinsertstudent)or die("error in insert student
part:".mysql_error());
  $student_id=$_POST['student_id'];
  $action="Addnewstudent:".$student_id;
  include('userlog.php');
if($resultinsertstudent)
{
    echo '<script> alert("your data added successfully");</script>'; }
```

Validation code

Code segments given below validate user inputs using JavaScript technology and handles user input errors before it is transmitted to the server.

//nic validation

```
function checknicno(){
    var nicno=document.getElementById("nic").value;
    if(nicno.length==10)
{
         var \text{ nicformat1=/}^{0-9}{9}[a-zA-Z0-9]{1}$/;
    if(nicno.match(nicformat1)){
      var nicformat2=/^[0-9]{9}[VvXx]{1}$/;
      if(nicno.match(nicformat2)){
         document.getElementById("nicerrormsg").innerHTML="";
}
      else{
         document.getElementById("nicerrormsg").innerHTML="last charactor must be V or
X";
         document.getElementById("nic").focus();
}
}
else{
      document.getElementById("nicerrormsg").innerHTML="first 9 charactor must be
numbers";
      document.getElementById("nic").focus();
}
}
else if (nicno.length==12){
    var nicformat=/^[0-9]{12}$/;
      if(nicno.match(nicformat)){
         document.getElementById("nicerrormsg").innerHTML="";
}
else{
```

```
document.getElementById("nicerrormsg").innerHTML="All charactor must be
numbers";
        document.getElementById("nic").focus();
}
}
else if (nicno.length==0){
    var nicformat=/^[0-9]{12}$/;
      if(nicno.match(nicformat)){
        document.getElementById("nicerrormsg").innerHTML="";
}
}
else {
    document.getElementById("nicerrormsg").innerHTML="your NIC no must be 10 or 12
charactor";
    document.getElementById("nic").focus();
}
}
// end nic validation
```

4.5 SECURITY

This online web based preschool management system is accessed by parents and Urumpirai kids' park manager level users from various places and transform many data, so it is important to maintain the security. The administration (director) has full privilege to access the system, in other hand other users have less privilege than director. From our system registered user only access the system, the registered user uses their user id and password to login and access the system. After register in our system the new user can access the system.

If user try to login with wrong password, our system allow only three times. More than three times system automatically load the forget password page. From forget password web page the system verify the user id and registered hand phone number then system send a password to user's registered phone number.

CHAPTER 5: EVALUATION

The evaluation process carried out entire software development life cycle to achieve the user friendly system with satisfaction of user requirements. From this phase the all aspect of online based preschool management system was tested with sample data and validates all.

The testing is very important to identify and detect error, check if the system is working properly or not, validating the system and verification all activities of the software implement correctly or not.

5.1 TESTING PROCEDURE

Testing procedures are the Testing is the process of evaluating a system or its component(s) with the intention to find whether it satisfies the specified requirements or not. In simple words, testing is executing a system in order to identify any gaps, errors, or missing requirements in contrary to the actual requirements.

This involves testing the system using different types of system tests that were performed on these system. This is aimed at uncovering errors and measuring the system capability. The following system tests are do in this system.

5.1.1 UNIT TESTING

A unit is the smallest testable part of an application like functions, classes, procedures, interfaces. Unit testing is a method by which individual units of source code are tested to determine if they are fit for use. The goal of unit testing is to segregate each part of the program and test that the individual parts are working correctly.

5.1.2 INTEGRATION TESTING

Integration testing is a systematic technique for constructing the program structure while conducting tests to uncover errors associated with interfacing. The objective is to take unit-tested module and build a program structure that has been dictated by design.

5.1.3 SYSTEM TESTING

System Testing is usually carried out by a team that is independent of the development team in order to measure the quality of the system unbiased. It includes both functional and Non-Functional testing. For example, login interface, register details and printing function etc.

5.1.4 ACCEPTANCE TESTING

The software has been tested with the realistic data given by the client and produced fruitful results. The client satisfying all the requirements specified by them has also developed the software within the time limitation specified. A demonstration has been given to the client and the end-user giving all the operational features.

5.2 TESTING PLANS FOR OUR SYSTEM

Testing was done each and every part of the system. The entire test plans were done before implementation on client side. From our test pan help to us identify the error and fixed it.

Our test modules were designed as follows:

- New user register module (Table 5. 1)
- Administrator module (Director) (Table 5. 2)
- Branch Head module (Table 5. 3)
- Staff module (Table 5. 4)
- Parent module (Table 5. 5)
- Common function module (Table 5. 6)

5.2.1 NEW USER REGISTER MODULE (WITHOUT LOGIN)

Test	Test Description	Steps to test	Expected Result	Status
No				
1	Login without register	Cannot access the system	Did not access the system	Pass
2	Register new staff or parent	System allow only phone number and send verification code to phone number to verify.	System allowed the phone number only and send a verification code to phone number and after verification allow to access	Pass

Table 5. 1: New User Module

5.2.2 ADMINISTRATION (DIRECTOR) MODULE

Test	Test Description	Steps to test	Expected	Status
No			Result	
1	Add new staff	Complete all	Display	Pass
		the fields	popup	
		correctly and	message	
		click save	"Your data	
		button.	added	
			successfully".	
2	Add new student	Complete all	Display	Pass
		the fields	popup	
		correctly and	message	
		click save	"Your data	
		button.	added	
			successfully".	
3	Add new branch	Complete all	Display	Pass
		the fields	popup	
		correctly and	message	
		click save	"Your data	
		button.	added	
			successfully".	
4	Add new class	Complete all	Display	Pass
		the fields	popup	
		correctly and	message	
		click save	"Your data	
		button.	added	
			successfully".	
5	Generate salary report	Select	Popup open	Pass
		appropriate	with relevant	
		options and	data in print	
		click print.	preview.	
6	Generate students'	Select the	Popup open	Pass
	attendance report	appropriate	with relevant	

		option	data in print	
		(branch, class,	preview.	
		from date and		
		to date) and		
		click print.		
7	Generate students'	Select the	Popup open	Pass
	payment report	appropriate	with relevant	
		option	data in print	
		(branch, event	preview.	
		and class) and		
		click print.		
8	Message	Complete all	Message send	Pass
		the fields	to relevant	
		correctly and	person	
		click send		
		button.		
9	Leave Confirmation	Click confirm/	Data view on	Pass
		reject button in	staff's leave	
		the status field.	page	

Table 5. 2: Director Module

5.2.3 BRANCH HEAD MODULE

Test	Test Description	Steps to test	Expected	Status
No			Result	
1	Add new staff	Complete all	Display	Pass
		the fields	popup	
		correctly and	message	
		click save	"Your data	
		button.	added	
			successfully".	

2	Add new student	Complete all	Display	Pass
		the fields	popup	
		correctly and	message	
		click save	"Your data	
		button.	added	
			successfully".	
3	Add new class	Complete all	Display	Pass
		the fields	popup	
		correctly and	message	
		click save	"Your data	
		button.	added	
			successfully".	
4	Generate students'	Select the	Print page	Pass
	attendance report	appropriate	open with	
		option	relevant	
		(branch, event	data in print	
		and class) and	preview.	
		click print.		
5	Generate students'	Select the	Popup open	Pass
	payment report	appropriate	with relevant	
		option	data in print	
		(branch, event	preview.	
		and class) and		
		click print.		
6	Message	Complete all	Message send	Pass
		the fields	to relevant	
		correctly and	person	
		click send		
		button.		
7	Apply Leave	Apply for the	Conformation	Pass
		leave.	send from	
			director.	

Table 5. 3: Branch Head Module

5.2.4 STAFF MODULE

Test	Test Description	Steps to test	Expected	Status
No			Result	
1	Add new event	Complete all	Display	Pass
		the fields	popup	
		correctly and	message	
		click save	"Your data	
		button.	added	
			successfully".	
2	Add new parent	Complete all	Display	Pass
		the fields	popup	
		correctly and	message	
		click save	"Your data	
		button.	added	
			successfully".	
3	Add new expenditure	Complete all	Display	Pass
		the fields	popup	
		correctly and	message	
		click save	"Your data	
		button.	added	
			successfully".	
4	Add new expenditure	Complete all	Display	Pass
		the fields	popup	
		correctly and	message	
		click save	"Your data	
		button.	added	
			successfully".	
5	Add new subject	Complete all	Display	Pass
		the fields	popup	
		correctly and	message	
		click save	"Your data	

		button.	added	
			successfully".	
6	View staff details	Select the	Staff can be	Pass
		view button.	able to view	
			staff details.	
7	View branch details	Select the	Staff can be	Pass
		view button.	able to view	
			branch details.	
8	Message	Complete all	Message send	Pass
		the fields	to relevant	
		correctly and	person	
		click send		
		button.		
9	Apply Leave	Apply for the	Conformation	Pass
		leave.	send from	
			director.	
10	Profile	Click the	Staff can be	Pass
		profile menu	able to view	
		top navigation	their profile	
		menu.	and able to	
			edit / print	
			profile	

Table 5. 4: Staff Module

5.2.5 PARENT MODULE

Test	Test Descrip	tion	Steps to tes	st	Expected	Status
No					Result	
1	View the	eir kid's	Select	the	Parent can be	Pass
	(student) det	ails	student's		able to view	
			details in	the	their kid's	
			menu.		details.	
2	View the	eir kid's	Select	the	Parent can be	Pass

	(student) attendance	student's	able to view	
		attendance in	their kid's	
		the menu and	attendance.	
		select the		
		appropriate		
		option.		
3	Add new absence	Complete all	Data saved in	Pass
		the fields	the database	
		correctly and		
		click save		
		button.		
4	View their kid's	Select the	Parent can be	Pass
	(student) marks	student's	able to view	
		marks in the	their kid's	
		menu and	attendance	
		select the	marks.	
		appropriate		
		option.		
5	View event details	Select the	Parent can be	Pass
		events details	able to view	
		in the menu.	event detail.	
6	Profile	Click the	Parent can be	Pass
		profile menu	able to view	
		top navigation	their profile	
		menu.	and able to	
			edit / print	
			profile	

Table 5. 5: Parent Module

5.2.6 COMMON FUNCTION MODULE

Test	Test Description	Steps to test	Expected	Status
No			Result	
1	Login testing	Enter wrong	Display error	Pass

	(negative)	username or	message as	
		password.	follows	
			(your user id is	
			not registered	
			in the db).	
2	Login testing	Enter a valid	Redirect to	Pass
	(positive)	registered	appropriate	
		username and	page based on	
		password	user id.	
3	Forget Password	Click forgot	Ask phone	Pass
		password on	number for	
		the login page.	verification if	
			provided	
			correctly and	
			send password	
			to registered	
			email.	
4	Logout	Click logout	Logout user	Pass
		link.	and direct to	
			index page	
			(home page).	
5	Test browser support	Access and	The system	Pass
		load system	should act and	
		into various	display	
		browsers	well-formed in	
		(Internet	all browsers.	
		Explorer,		
		Firefox,		
		Google		
		Chrome).		
6	Test Database	Import	System should	Pass

	connections	database into	able to connect	
		various system	to database.	
		and change the		
		values in		
		database		
		connection		
		coding.		
7	Form validation	Enter wrong	Display error	Pass
		parameters for	message	
		the field	before submit	
			the form using	
			JavaScript.	
8	Test OS compatibility	Access the	System should	Pass
		system from	able to work	
		various	finely in all	
		Windows	OSs	
		/Linux		
		environments		

Table 5. 6: Common Module

5.3 TEST DATA AND TEST RESULTS

Sample data and some past record from the pre-school were entered into the system to all modules which need to be tested in order to ensure the correctness. Each data in the all forms were tested to find out whether the system will provide the appropriate error/success message according to the data is entered before submitting the form to avoid in-appropriate data to be entered into the database

Users Acceptance Chart

The system was tested by different types of users and got feedback from them. The user evaluation chart is shown in the following Figure 5.1:

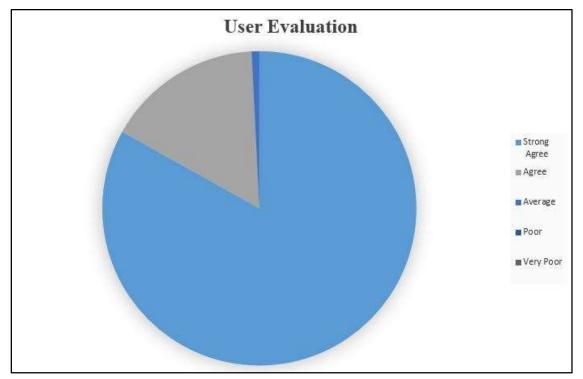


Figure 5. 1: User Acceptance chart

CLIENT ACCEPTANCE REPORT

The client acceptance test result is shown in the following Figure 5.2:

			service	organiz 6		IAVA SWAMY K	OVIL RO
	Admin Eva	luation	Repo	rt			110.00
Test Case	Test Case	Strong Agree		Average	Poor	Very Poor	
1	New User Register	V					
2	Administrator Module (Director)	V					
3	Branch Head Module	1					
4	Staff Module	V					
5	Parent Module	1					
6	Common Function Module	1					
7	User Friendly of System	1					
8	Clear of error messages, validation and verification code		1	i i			
9	Access the system		/				
10	Overall perform of the system	1					
Evaluate Signatur	you feel about the system? ed By: Manchaling and e: M-y- 30/10/2017 JMPIRAL KIDS PARK	w.					

Figure 5. 2: Client Acceptance Report

USERS ACCEPTANCE RESULT

Evaluation report about my system are obtain from the director of the Urumpirai kids' park which indicates point Figure 5. 3:

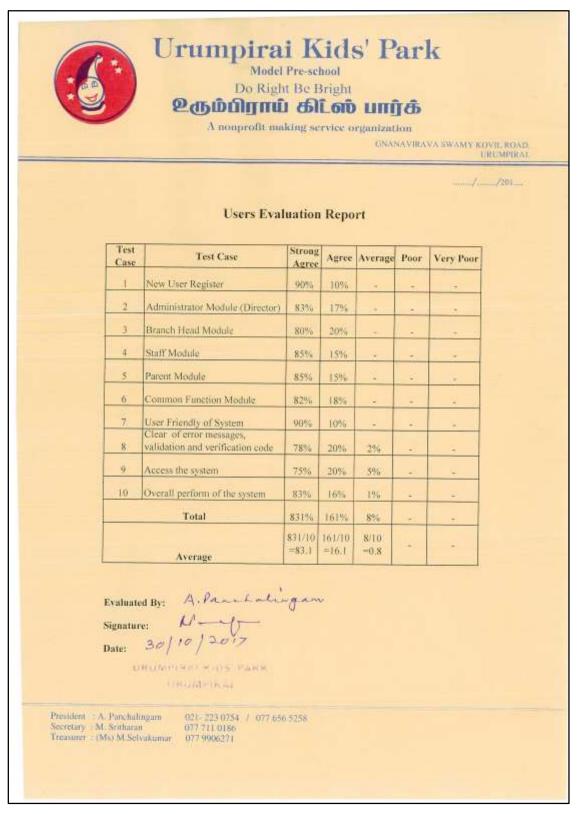


Figure 5. 3: User Acceptance Report

CHAPTER 6: CONCLUSION

This project was successfully completed within the time period. The project has been developed in php. All the modules are tested separately via testing procedures and put together to form the main kidspark system. Finally the system is tested with real data and everything worked successfully. Thus the system has fulfilled the entire objects identified.

6.1 CONCLUSION

From the start of the institute they keeps their records manually and faces many difficulties when using manual system. The details of the students are recorded when students are admitted to the preschool in record books and kept. Staff's details are gathered during the appointment to the preschool, the details of the staff are recorded in record books and kept. With that, every time the details are updated. This online preschool management system was developed to address those drawbacks as well as to optimize their overall process and through this to help them to keep their institute name at the top level. This system developed based on PHP, HTML, CSS and JavaScript with back end MySQL.

At the end, system successfully satisfied the user requirements including functional and non-functional requirements. User with minimum knowledge about computers can also operate the system easily. By automating some processes, the workload of the user was reduced and it helped in saving the time of the client efficiently. Moreover, this automated system helps in reducing common mistakes that might occur by the user. Getting user feedback and properly testing the system helped to validate the overall system and to avoid conflicts that can occur.

6.2 LESSION LEARNT

This online pre-school management system for Urumpirai kids' park provide good knowledge to us and helps to forward our carrier life in easy way. The project give practical knowledge of software development and also helped to gain the experience of how to apply the theories that had learnt in previous semester of Bachelor of Information Technology (BIT) degree in practical wise.

In the start of the project proposal I did not have sufficient knowledge to carry out the project. I gained valuable knowledge in doing a successful professional system development project while following the detailed process and the guidelines provided by the university. The scheduled processes helped me in managing time efficiently. The implementation phase was the toughest and most interesting phase of the project, as it allowed me to apply the practical knowledge that I've gained on programming languages such as PHP, Java Scripts, CSS and many more development tools and techniques. Writing the dissertation was an exciting task of the project and it was a practice to my report writing. It helped me in developing my skills on writing and designing technical reports.

6.3 FUTURE WORK

This system fully satisfies the client requirements, but in future, some modules of this system can be replaced with the upcoming technology. Some of the future work is listed down here:

- ✓ Allow the parents to settle their kids' payment online.
- ✓ Settle the staff salary through bank.
- ✓ Add discussion forms and online exam facilities.
- ✓ Develop a mobile application integrated with this system.

REFERENCES

[1] KinderCare, [online],

Available: http://www.kindercare.com/programs-curriculum/programs-by-age/preschool, [Accessed on: 13.07.2017]

[2] Little Amigos, [online]

Available: https://www.littleamigos.org/, [Accessed on: 13.07.2017]

[3] Rainbow preschool, [online]

Available: http://www.rainbow-preschool.de/, [Accessed on: 13.07.2017]

[4] Wikipedia – Interface Design [online]

Available: https://en.wikipedia.org/wiki/User_interface_design, [Accessed on: 24.09.2017]

[5] Wikipedia – Implementation [online]

Available: https://en.wikipedia.org/wiki/Implementation, [Accessed on: 24.09.2017]

[6] Gentelella - Bootstrap Admin Template [online]

Available: https://colorlib.com/polygon/gentelella/, [Accessed on: 24.06.2017]

APPENDIX

APPENDIX A - SYSTEM DOCUMENTATION

We give instruction how to install our system and database, and it is help to client to installation and maintenance.

Step 1: Double click on download file WampServer 2.4 and just follow the instruction. Everything is automatic.



Figure A. 1: WampServer Installation Step 1

Step 2: After click next, accept the agreement and click next.

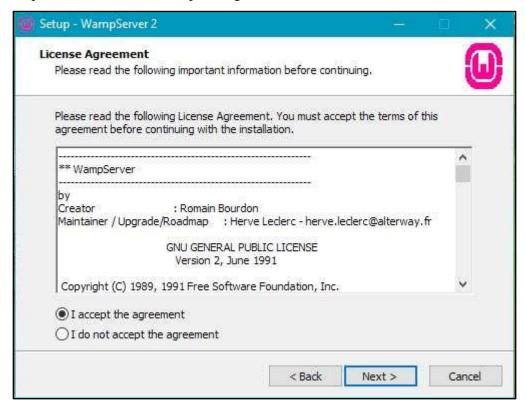


Figure A. 2: WampServer Installation Step 2

Step 3: Select the installation location of WampServer.

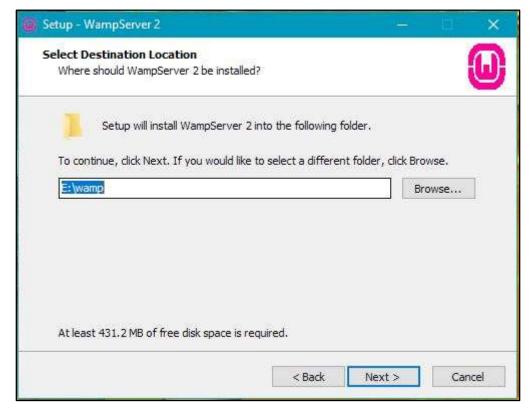


Figure A. 3: WampServer Installation Step 3

Step 4: Select additional tasks of WampServer.

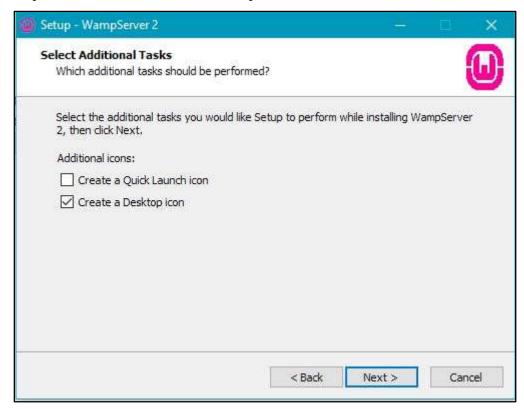


Figure A. 4: WampServer Installation Step 4

Step 5: Click Install and It finish automatically.

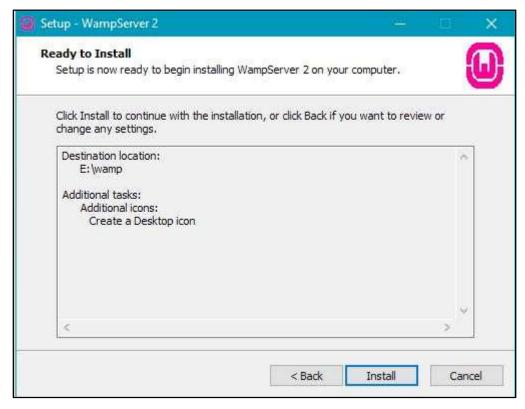


Figure A. 5: WampServer Installation Step 5

Step 6: After Install, start the WampSever in taskbar WampServer visible in green colour. After green colour, go and type in browser's address bar "localhost or 127.0.0.1".



Figure A. 6: WampServer Installation Step 6

Step 7: In browser, there is phpmyadmin under Tools heading, click that link and type username as "root" and password is blank. And click go button.



Figure A. 7: WampServer Installation Step 7

APPENDIX B - DESIGN DOCUMENTATION

The additional diagram such as activity diagram and sequence diagram of this system include in this section.

Activity diagram for student attendance is shown on following Figure B.1 Activity diagram for student attendance.

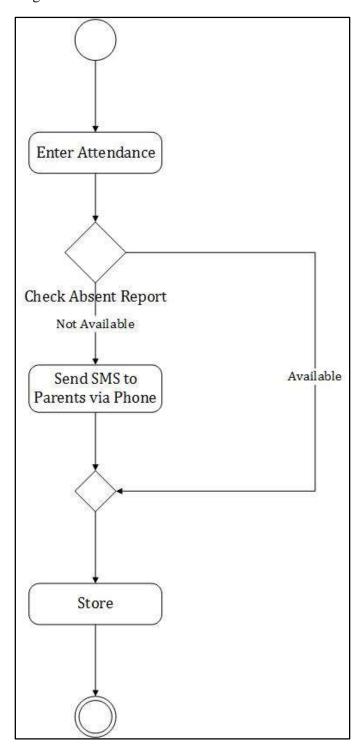


Figure B. 2: Activity diagram for student attendance

Activity diagram for staff leave management is shown on following Figure B.2:

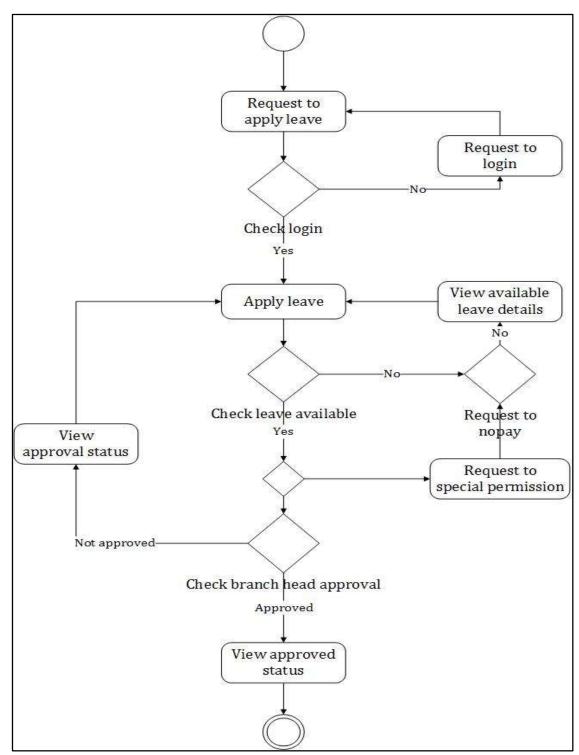


Figure B. 3: Activity diagram for staff leave management

Sequence diagram for student performance is shown on Figure B.3 Sequence diagram for student performance.

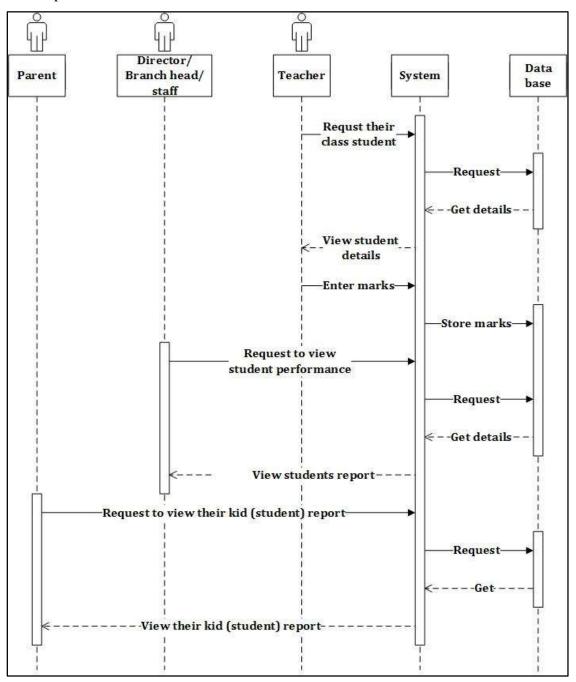


Figure B. 4: Sequence diagram for student performance

Sequence diagram for staff leave is shown on Figure B.4:

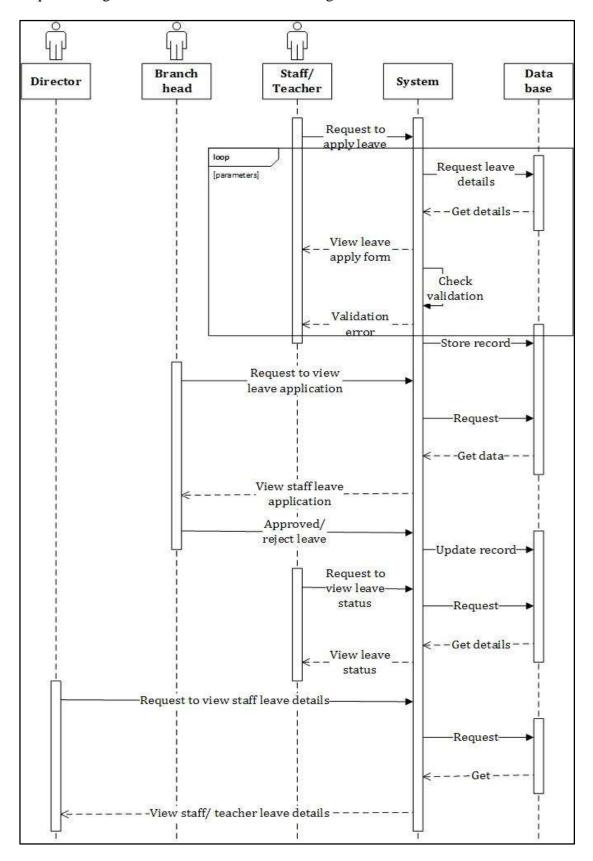


Figure B. 5: Sequence diagram for staff leave

Data Flow Diagram for preschool management system is shown on Figure B.5:

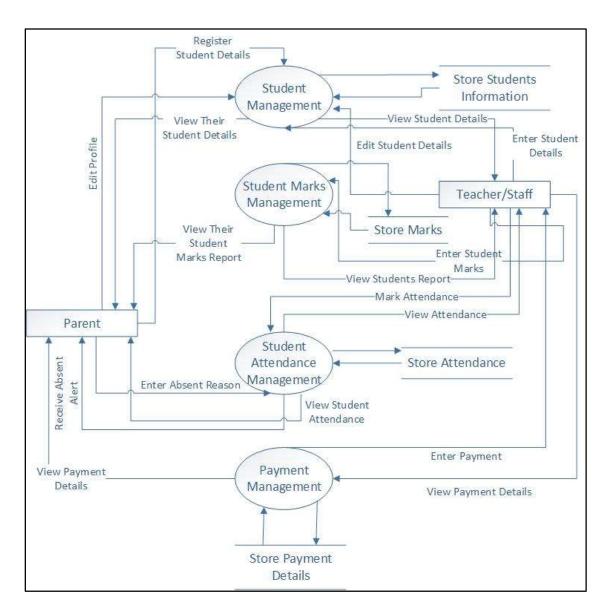


Figure B. 6: Data Flow Diagram Preschool management system level 1

APPENDIX C – USER DOCUMENTATION

User documentation refers to the documentation for this online preschool management system. The user documentation is designed to assist director, branch head, teachers, staff and parents to use the system. User levels are available to each and every member and different profile pages are provided for their management.

Index Page (Home menu)

An index page is generally the main page. Is used to facilitate navigation to other pages. Type the URL http://localhost/kidspark/ and navigate. After navigation, user can find the Login page following Figure C.1 Index page gives overall structure of the system. In this page contains the following menus: home, about us, gallery, contact us and login. Home page refers as index page, it contains 'what kids learn in kids' park', 'our courses', events and contacts. 'About us' page gives a short description of this institute. 'Gallery' page shows some image of students' performance. 'Contact us' page facilitate the visitor to contact information.



Figure C. 1: Index Page

Login Page

Login page provides an individual gains access to a computer system by identifying and authenticating themselves. The following Figure C.2 shows the Login Page where the user will type wrong user name and password.

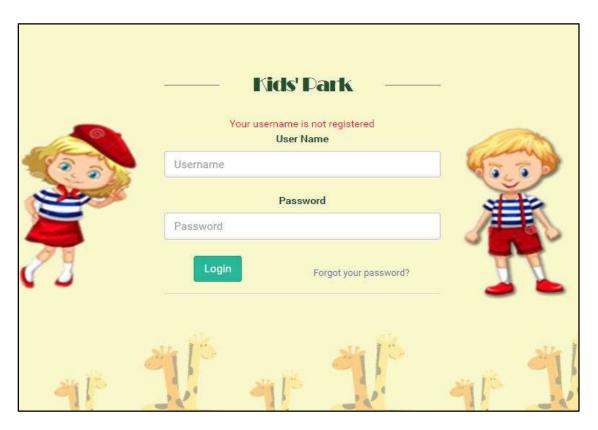


Figure C. 2: Login page with wrong user name

When enter correct username and wrong password, the system shows the error message that the password is incorrect, please try again. This error message is shown in the following Figure C.3 Incorrect Password:



Figure C. 3: Incorrect Password

If registered user attempt more than three times login, system provides a message and redirect to forget password form.

About Us Menu

It contains short introduction about Urumpirai kids' park. Refer Figure C.4: About Us Menu



Figure C. 4: About Us Menu

Gallery Menu

It contains number of galleries of Urumpirai kids' park. Refer the figure C.5: Gallery Menu



Figure C. 5: Gallery Menu

Contact Us Menu

Contact us page shows the contact details about this institute and its show the location of the institute in Figure C.6: Contact Us Menu

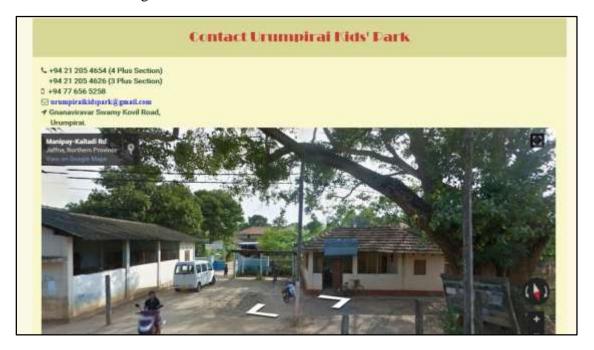


Figure C. 6: Contact Us Menu

Administrator (Director) Interface

After login as director, the system shows the home page and director menu. The home page is same as index page that already illustrated about this page under index page. In this administrator interface, it include following menu such as home, about us, gallery, contact us, students, staff, payment, branch and report. The director interface is shown in the following Figure C.7: Director Interface:



Figure C. 7 Director Interface

From home link top navigation dropdown user menu contain as following: profile, change password and log out. Every user interface have this link with same function. The following Figure C.8 shows the dropdown user menu of the system.



Figure C. 8: Dropdown User Menu

When we click the log out link the system logout and the system destroys all the session details and shows the public menu and home page. Profile link shows the personal detail of that the user log in the system. It allows edit and print privilege to the user. The following Figure C.9 shows the profile.



Figure C. 9: Profile

The change password link provides a form to change user password. In the form user has to enter the current password, new password and confirm new password and submit it. The change password interface is shown in the following Figure C.10 Change Password:



Figure C. 10: Change Password

Staff menu

From the director interface staff menu contain following pages: manage staff details, staff's leave and salary. Branch head interface have this menu with same page. Following Figure C.11 shows staff menu:



Figure C. 11: Staff menu

View staff details

Please see the Figure C.12 to get an idea about it and the arrow heads under the figure. This belongs to http://localhost/kidspark/index.php?pg=staff.php&option=view link



Figure C. 12: View Staff Details

- ➤ Add new staff: This helps to add new staff.
- **Print:** Print button help to print data.
- > Show Entries: This helps to manage how many records should appear at a time. If there are more records than selected value, user can navigate to next set of items using which is located at the bottom right hand side of the table.
- > Search Box: Data or set of data wanted by the user can be found with the help of this.
- ➤ View: Additional information belonging to a particular record can be viewed with the help of this.
- **Edit:** It helps to edit particular details.
- **Delete:** A particular data item can be deleted by using this.

Add New Staff

Addition of new staff to the system is allowed to the director by this page. Refer figure C.13: Add new staff

Path: Staff → Manage staff details → Click add new staff button

Fill all the details correctly and click on save button to add data. If the director cancel it click on cancel button.

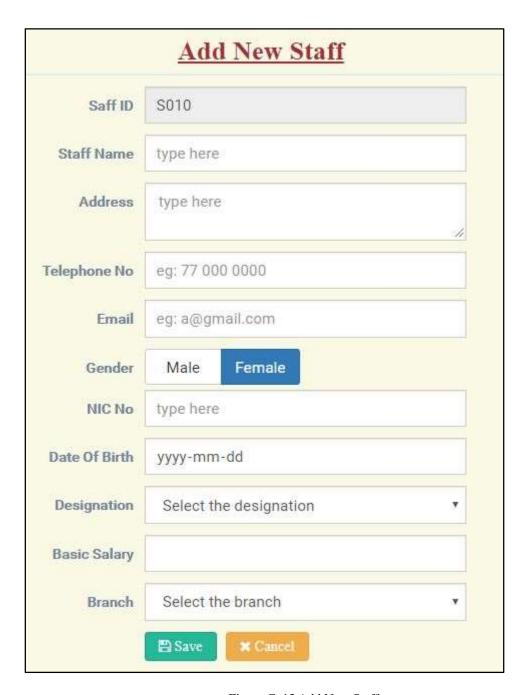


Figure C. 13 Add New Staff

After click save button a message will be display in this page. Refer Figure C.14



Figure C. 14: Data successfully added message

Print (staff's details)

Print staff button help print staff details. Refer figure C.15



Figure C. 15: Print staff details

After that click the print button it load the print page. Refer figure C.16

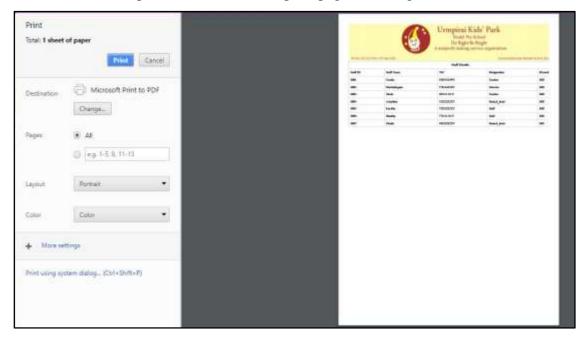


Figure C. 16: Print page

View particular information of staff

This page contain all personal information and educational qualification of staff. It contain following button: add educational qualification, edit, go back and print. Edit button help to edit information.

When click the go back button it goes to the view page. Refer figure C.17

Path: Staff → Manage staff details → Click view button

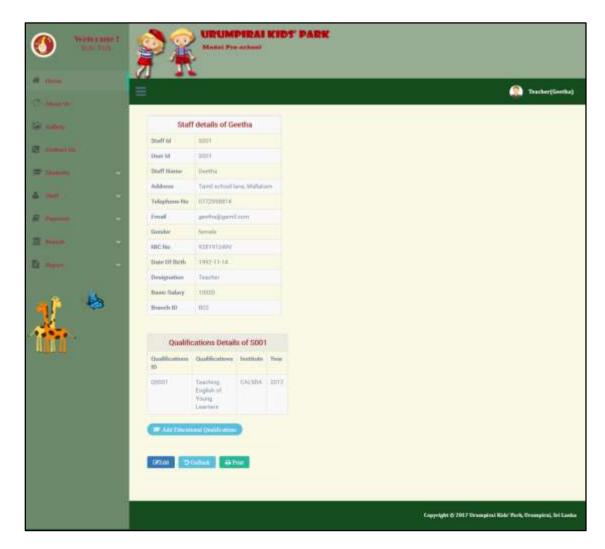


Figure C. 17: View staff additional information

Edit staff

Edit staff detail facilitate to edit information. Director and branch head have the permission to edit this page. After editing the information click the update button or if you wish to make no changes click the cancel button. Refer figure C.18.

Path: Staff → Manage staff details → Edit

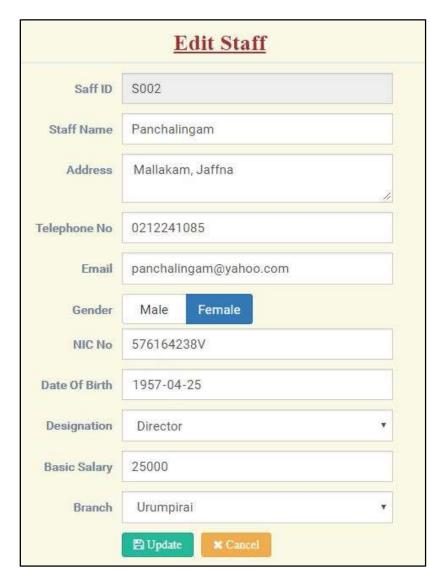


Figure C. 18: Edit Staff

Delete staff

It helps delete particular data. If we click the delete button there is an alert will display. Refer figure C.19. If we click the ok button that record will be delete or click the cancel button it will not be delete.

Path: Staff → Manage staff details → Delete



Figure C. 19: Delete Staff

Staff's leave page

This page contain staff's leave details and status field has two button to confirm or reject the leave applied by the staff. Branch head interface has this page with same function. Refer figure C.20.

Path: Staff → Staff's leave



Figure C. 20: Staff leave confirmation table

Salary Page

This page refer the salary details of staff. Select the branch, year and month then click print button to print this page. Refer Figure C.21.

Path: Staff → Salary



Figure C. 21: Staff's salary

Payment menu

From the director interface payment menu contain following pages: Class rate, student event payment and student class payment. Branch head interface has this page with same function. Following Figure C.22 shows payment menu:



Figure C. 22: Payment menu

Class rate page

Class rate define the rate information of particular class. Refer Figure C.23

Path: Payment → Class Rate



Figure C. 23: Class Rate

Student Event Payment page

Path: Payment → Students' event payment

This page has three select element such as: branch, event and class. If the director select any branch, it load the event and class element. After select the event and class, we can see the students' event payment report. Staff interface has this page with same function. Refer Figure C.24

If any student did not make any event payment, there is a add payment button shows under the amount field. Director can be able to print the report too.

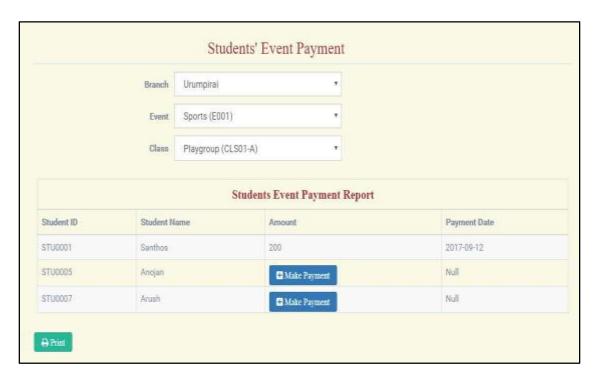


Figure C. 24: Student Event Payment Report

When we click the print button, the image will be: Refer Figure C.25



Figure C. 25: Print event payment report

When click the make payment button, it goes to the add payment page. Refer figure C.26



Figure C. 26: Add event payment

Student Class Payment page

Path: Payment → Student class Payment

This page has three select element such as: branch, class and year. If the director select any branch, it load the class and year element. After select the class and year, we can see the students' class payment report. Staff interface has this page with same function. Refer Figure C.27.

If any student did not make any class payment, there is a add payment button shows under the amount field. Director can be able to print the report too.

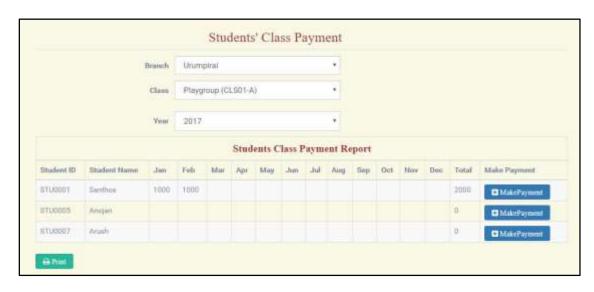


Figure C. 27: Students' class payment

When click the make payment button, it goes to the add payment page. Refer Figure C.28



Figure C. 28: Add Class Payment

Manage Students' Details

Path: Students → Manage Students' Details

Director can see all the students detail in this view table. This page has view, edit, delete, add new students and print button. Staff and branch head user interface have this page with same function. Refer Figure C.29.

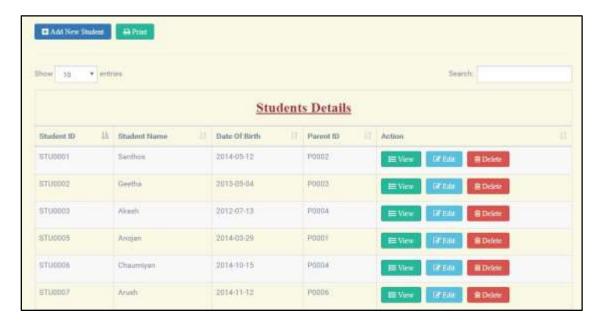


Figure C. 29: Students Details

Add new student

Path: Students → Manage Students' Details → Add New Student
In this page director have to fill all the details properly. Refer Figure C.30
Select link redirect to select parent page.

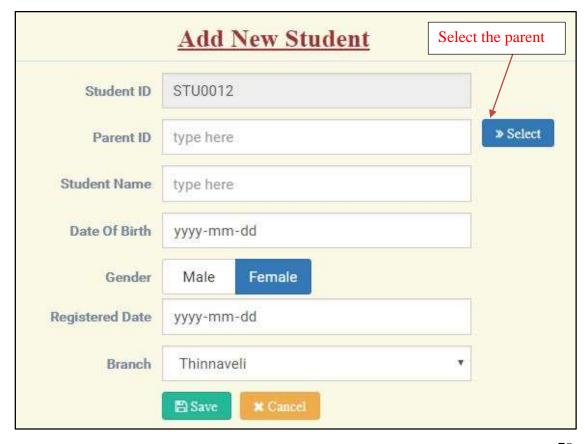


Figure C. 30: Add New Staff

Select parent

In this page, if director click the select button parent id will be filled in the parent id field in student add new page. Refer Figure C.31

If this page have not particular student parent detail director has to click add new button.

Refer Figure C.32



Figure C. 31: Select parent



Figure C. 32: Add new parent

After fill all the details click save button. It will be save in the database and redirect the select parent page.

View Particular Student details

Path: Students → Manage Students' Details → View

Director can see student details and class detail of a particular student. Refer figure C.33

If a student is not added any class click add new class button. Refer figure C.34



Figure C. 33: Student personal information



Figure C. 34: Add Class Information

Manage Branch Details

Path: Branch → Manage Branch Details

Director can see all branchs detail in this view table. This page has view, edit, delete, add new branch and print button. Refer Figure C.35



Figure C. 35: Mange branch detail

Subject

Path: Students → Manage Subject details

Director can see all subject details in this view table. This page has view, edit, delete, add new subject and print button. Branch head interface also has this page with same function. Refer Figure C.36



Figure C. 36: Subject detail

Class Subject Map

Path: Students → Class Subject map

This page illustrates add more subject in selected class. See the steps as follow:

Select Class → View table → Select Subject → Click add (it will be add in table)



Figure C. 37: Class Subject Map

Branch Head Interface

After login as branch head, the system shows the home page will be same as director.

Profile Menu changed as branch head. Refer figure C.38

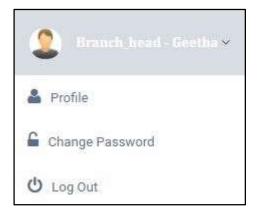


Figure C. 38: Branch head profile menu

Manage Class Details

Path: Students → Manage Class Detail

Branch head can see all the class detail in this view table. This page has view, edit, delete, add new students and print button. Director interface also has this page with same function.



Figure C. 39: Manage Class Details

Staff Interface

After login as staff, the system shows the home page will be same as director.

Profile Menu changed as staff. Refer figure C.40



Figure C. 40: Staff Profile Menu

Manage Expenditure Details

Path: Branch → Manage Expenditure Details

Staff can see all the expense detail in this view table. This page has view, edit, delete, add new expense and print button. Director and branch head interface also have this page with same function.



Figure C. 41: Expense Details

Apply Leave

Path: Staff → Apply leave

Staff can see all their leave detail in this view table. This page has view, edit, delete, add new expense and print button. Teacher interface also have this page with same function.



Figure C. 42: Apply Leave

Message

Path: Branch → Message

Staff can send message to select the message to option (other staff / director/ teacher /branch head /parent) and type the massage in message text area after click send button.

Director, Branch head and Teacher interface also have this page with same function.

Refer Figure C.43



Figure C. 43: Message

Teacher Interface

After login as teacher, the system shows the home page and teacher menu. The home page is same as index page that already illustrated under index page. This teacher interface includes following menu such as home, about us, gallery, contact us, students, staff, branch and report. The teacher interface is shown in the following Figure C.44 teacher Interface:



Figure C. 44: Teacher Interface

Student menu

From the student interface student menu contains following pages: manage students' details, students' attendance, add your students' marks, and view your students' marks and absence. Following Figure C.45 shows student menu:

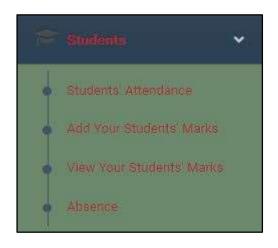


Figure C. 45: Students Menu

Students' Attendance page

Path: Students → Manage Students' Details

In this page teacher can be mark their class students' attendance in date wise. S/he can select the date from the date option. These steps include the following:

Select Class \rightarrow Select Date \rightarrow Select the Present/ absent in the status field \rightarrow Click save button.

Refer Figure C.46 Students' attendance.

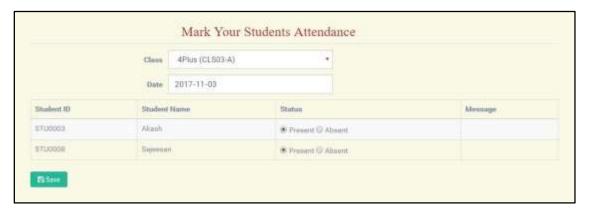


Figure C. 46: Students' attendance

In this students' attendance table, status field refer the teacher can be able to click present or absent button. Message field represents if a student informed about their absent via message there is massage shown under the message field.

Add Your Students' Marks page

Path: Students \rightarrow Add Your \rightarrow Students \rightarrow Marks

The form that helps to teacher add their class students' marks. The steps are as follows:

Select class \rightarrow Select subject \rightarrow Select term \rightarrow add the marks \rightarrow click save button

Refer figure C.47



Figure C. 47: Add your student marks

View Your Students' Marks page

Path: Students → View your students' marks

Teacher can able to see their class students' marks. These steps include the following:

Select Class \rightarrow Select Year \rightarrow Select Term, after teacher can be able to see their students' marks table.

Refer Figure C.48



Figure C. 48: Students' Marks Report

Teacher can print this report too. The report will be: Refer the Figure C.49



Figure C. 49: Print student report

Parent Interface

After login as parent, the system shows the home page and parent menu. The home page is same as index page that already illustrated under index page. This parent interface includes following menu such as home, about us, gallery, contact us, student's details, student's attendance, absence, view students marks and events. The parent interface is shown in the following Figure C.50 parent Interface:



Figure C. 50: Parent Interface

Students' Details menu

In this page parent can be able to see their kid's/kids' detail and also see their detail.

First parent should be select their kid (student) because parent's one or more kid's study in this institute. Refer figure C.51

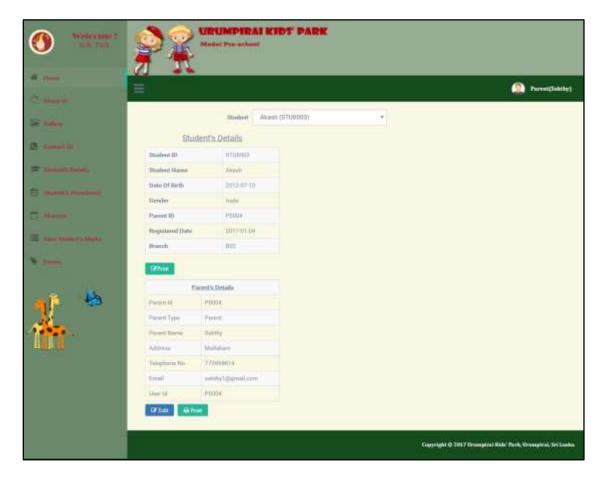


Figure C. 51: Kid's detail in parent interface

In this page parent can be able to print their kid's details and edit/print their details.

Students' attendance menu

In this page parents can see their student's attendance. See the following steps:

Select Student \rightarrow Select from \rightarrow Select To, after teacher can be able to see your kid's attendance. Refer figure C.52

Student	Akash (STU0003)	*		
	2017-10-01			
To	2017-10-05			
Date	Attendance		Report	
2017-10-01	. Y		Present	
2017-10-02	1		Present	
2017/18/09	1		Present.	

Figure C. 52: Kid's attendance report

Absence

Parent can see their kid's (student) details. And they can inform (apply) their kid absent via add new button. Refer Figure C.53



Figure C. 53: Absent detail

Add new absent

Path: Absence → Add new



Figure C. 54: Add new absent

After that, if you want to save the details click save button otherwise click cancel button.

View student's marks

Parent can be able to see their kid's marks after select following option such as:

Select class \rightarrow Select year \rightarrow Select Term



Figure C. 55: Kid's marks report

APPENDIX D - MANAGEMENT REPORT

The system allows the director, branch head, teacher and staff to generate reports with their appropriate power in different categories. They can view the following reports: students' details (class/ division/ branch wise), staff details, students' attendance, Expense, students marks.

Students' details - class wise report

System Administrator (director) and branch head to view students' details (class wise) by selected following steps:

Select branch \rightarrow Select class \rightarrow Select Year, after that details will be displayed.



Figure D. 1: Student Report Class Wise

Students' details - division wise report

System Administrator (director), branch head and teacher to view students' details (division wise) by selected following steps:

Select branch \rightarrow Select division \rightarrow Select Year, after that details will be displayed.

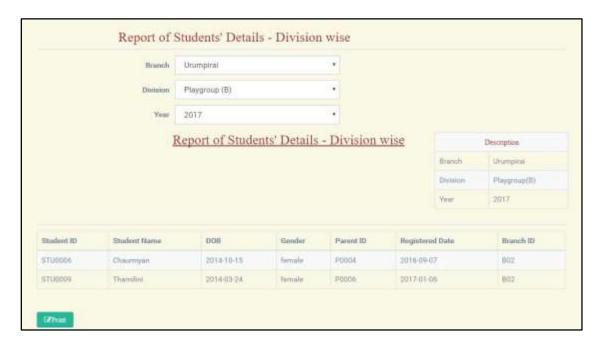


Figure D. 2: Student Report Division Wise

Students' details - branch wise report

System Administrator (director) and branch head to view students' details (branch wise) by selected following steps:

Select branch \rightarrow Select Year, after that details will be displayed.



Figure D. 3: Student Report Branch Wise

Staff's details - branch wise report

System Administrator (director) and branch head to view staff's details (branch wise) by selected branch, after that details will be displayed.

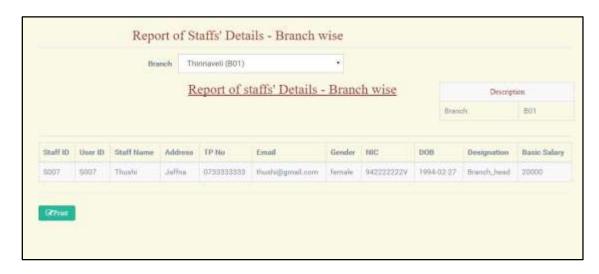


Figure D. 4: Staff Branch wise

Students' attendance report

System Administrator (director) to view students' attendance report by selected following steps:

Select branch \rightarrow Select class \rightarrow Select from date \rightarrow select to date, after that details will be displayed.



Figure D. 5: Student attendance report

Expense report

System Administrator (director), branch head and staff to view expense report by selected following steps:

Select branch \rightarrow Select from date \rightarrow select to date, after that details will be displayed.



Figure D. 6: Expense Report

Students' marks report

System Administrator (director), branch head and staff to view students' report by selected following steps:

Select branch \rightarrow Select class \rightarrow Select year \rightarrow Select term, after that details will be displayed.



Figure D. 7: Student marks branch wise

Staff's salary report

System Administrator (director) and branch head to view staffs' salary by selected following steps:

Select branch \rightarrow Select year \rightarrow Select month, after that details will be displayed.



Figure D. 8: Staff Salary

APPENDIX E - TEST RESULTS

In this online pre-school management system view appropriate error messages and success messages and information were displayed to notify the user about the activities.

General Forms

Test	Testing step	Expected result	Status
No			
1	Select after present date in Date of Birth field	Student Name Amala Date Of Birth 2017-11-05 Invalid Date of Birth	Pass
2	Save without fill the field	Parent ID: Type here cnt Name type here type here Please fill out this field.	Pass
3	Type phone number in incorrect format	Address Jaffna Telephone No 772998814 TPNo must be in 10 numbers	Pass
4	Type email in incorrect format	Telephone No 0772998814 Email nathan@yahoo Invalid Email	Pass
5	Click the delete button	localhost says: Do you want to delete this record? OK Cancel	Pass
6	Type NIC number in incorrect format	Gender Male Female NIC No 7522666 your NIC no must be 10 or 12 charactor	Pass
7	Automatically show the user id when we change password	Change your password User ID S002	Pass

Table E. 1: Test Result

Common Test Cases

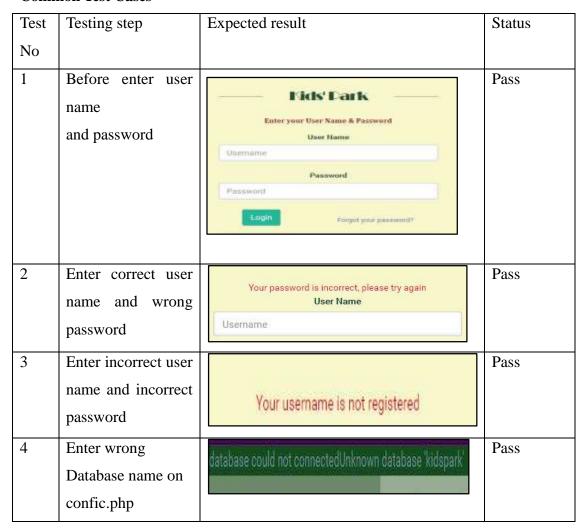


Table E. 2: Common Test Result

Report Module

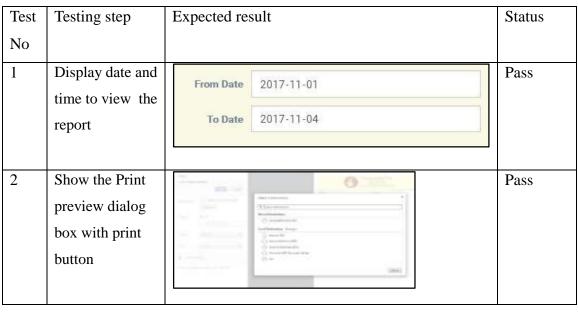


Table E. 3: Report Test

APPENDIX F - CODE LISTINGS

This section provides more detailed view of the coding to the users. Since the code section is very lengthy, only important section of the coding are provided below with appropriate comments to make the user more comfortable with the coding.

Form

</div>

```
HTML coding for create a form
<form action="" method="post" id="demo-form2" data-parsley-validate class="form-</pre>
horizontal form-label-left">
    <div class="form-group">
      <label class="control-label col-md-3 col-sm-3 col-xs-12" for="msg_id"> Message
ID </label>
      <div class="col-md-4 col-sm-6 col-xs-12">
      <?php
       //generate msg id
           $sql="SELECT msg_id
               FROM 'messages'
               ORDER BY msg id DESC";
               $result=mysql_query($sql)or die ("error in msg_id:".mysql_error());
               $row=mysql_fetch_assoc($result);
               $msg_id=$row['msg_id'];
                 if(mysql_num_rows($result)>0){
                    $msg_id=++$msg_id;
                  else{
                    $msg_id="MG0001";
         //end generate msg id
        ?>
         <!-- /load branch -->
                 type="text"
                               name="msg id" id="msg id"
                                                                 required="required"
value="<?php echo $msg_id; ?>" readonly class="form-control col-md-7 col-xs-12" >
      </div>
```

```
<div class="form-group">
      <label class="control-label col-md-3 col-sm-3 col-xs-12" for="msg_from">
Message From </label>
      <div class="col-md-4 col-sm-6 col-xs-12">
        <?php
          $Sql1="SELECT user_id,staff_name
     FROM staffs
     WHERE user id='$user id''';
          $result1=mysql_query($Sql1)or die ("error in sql1:".mysql_error());
          $row1=mysql_fetch_assoc($result1);
          $stf_name=$row1['staff_name'];
   ?>
       <input type="text" name="msg_from" id="msg_from" required="required"</pre>
value="<?php echo $stf_name; ?>" readonly class="form-control col-md-7 col-xs-12" >
      </div>
    </div>
    <div class="form-group">
      <label class="control-label col-md-3 col-sm-3 col-xs-12" for="msg_togrp">
Message To </label>
      <div class="col-md-4 col-sm-6 col-xs-12">
        <select name="msg_togrp" id="msg_togrp" class="form-control" required</pre>
onChange="getmsgto()">
          <option value="none" selected>Select The Person
          <option value="Director">Director</option>
          <option value="Teacher">Teacher</option>
          <option value="Parent">Parent</option>
          <option value="Branch_head">Branch Head</option>
          <option value="Staff">Staff</option>
        </select>
      </div>
    </div>
        <div id="loadmsgto" class="form-group">
```

```
</div>
    <div class="form-group">
      <label class="control-label col-md-3 col-sm-3 col-xs-12"> Message </label>
      <div class="col-md-4 col-sm-6 col-xs-12">
        <textarea name="msg" id="msg" class="resizable_textarea form-control"
placeholder="type here"></textarea>
      </div>
    </div>
    <div class="form-group">
    <label class="control-label col-md-3 col-sm-3 col-xs-12" for="stuyear"> Date
</label>
      <div class="col-md-4 col-sm-6 col-xs-12">
         <input type="text" name="date" id="date" required="required" value="<?php</pre>
echo date("Y/m/d");?>" class="form-control col-md-7 col-xs-12" readonly>
      </div>
    </div>
    <div class="form-group">
      <div class="col-md-4 col-sm-6 col-xs-12 col-md-offset-3">
           <button type="submit" name="btnsend" id="btnsend" class="btn btn-success"</pre>
fa fa-save"> Send </button>
      </div>
    </div>
</form>
```

Generate ID automatically

This coding automatically increase the Id in the Id field when add new detail. It is used in many id generate such as: generate student id, branch id, expense id, subject id, event id and class id.

```
<!-- generate staffid automatically start -->

<!-- staffid automatically start -->

| staffid automatically start -->
| staffid automatically start -->

| staffid automatically start -->

| staffid automatically start -->

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| staffid automatically start -->
| staffid automatically start -->
| staffid automatically start -->
| staffid automa
```

```
$row=mysql_fetch_assoc($result1);
$staff_id=$row['staff_id'];
if(mysql_num_rows($result1)>0){
    $staff_id=++$staff_id;
}
else{
    $staff_id="S001";
}
?>
<!-- /generate staffid automatically start -->
```

Email Validation

This coding contain the email format, if we type wrong format it display error message.

```
//validation for email function checkemail(){

var email=document.getElementById("email").value;

var emailformat=/^([a-zA-Z0-9_\.\-])+\@+(([a-zA-Z0-9\-])+\.)+([a-z0-9A-Z]{2,4})+$/;

if (email.match(emailformat)){

document.getElementById("emailerrormsg").innerHTML="";

}

else{

document.getElementById("emailerrormsg").innerHTML="Invalid Email";

//document.getElementById("email").focus();

}

// end validation for email
```

Edit/Update Record

Update coding helps to update after edit the records, following pages include this coding such as: edit student detail, edit staff detail, edit class details, edit subject details, edit event details, edit parent details and edit profile.

```
if(isset($_POST['btnupdate']))
```

```
{
  $expense_id=$_POST['expense_id'];
  $sqlupdate="UPDATE expenditures SET
           expense_for="".mysql_real_escape_string($_POST['expense_for'])."",
           date="".mysql_real_escape_string($_POST['date'])."",
           amount="".mysql_real_escape_string($_POST['amount'])."",
           status="".mysql_real_escape_string($_POST['status'])."",
           branch_id="".mysql_real_escape_string($_POST['branch_id'])."'
           WHERE expense_id='$expense_id''';
                       $resultupdate=mysql_query($sqlupdate) or die("error in update
expenditures part:".mysql_error());
                      if($resultupdate){
             header('location:index.php?pg=expenditures.php&option=new');
}
Call a function to get information (get student detail-class wise)
<head>
<script>
function getstudentdetailclasswise(){
var class_type=document.getElementById("class_type").value;
var year=document.getElementById("year").value;
var branch_id=document.getElementById("branch_id").value;
var xmlhttp=new XMLHttpRequest();
xmlhttp.onreadystatechange=function(){
if(xmlhttp.readyState==4 & xmlhttp.status==200){
document.getElementById ("loadstudentdetailclasswise"). innerHTML=xmlhttp.responseText;\\
```

```
}
}
xmlhttp.open("GET","reportajaxpage.php?option=loadstudentdetailclasswise\&class\_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_type="+class_ty
ass_type+"&year="+year+"&branch_id="+branch_id,true);
xmlhttp.send();
}
</script>
</head>
View report
This coding helps to view report in particular page.
//start studentdetail class wise-----
else if($_GET['option']=="loadstudentdetailclasswise"){
$class_type=$_GET['class_type'];
 $year=$_GET['year'];
 $branch_id=$_GET['branch_id'];
              $stuviewclzwise="SELECT S.student_id, S.student_name, S.dob, S.gender, S.parent_id,
S.registered_date, S.branch_id
 FROM students as S, student_class_maps as SCM, classes as C
          WHERE S.student id=SCM.student id
           AND SCM.class id=C.class id
                   AND C.class_type='$class_type'
                  AND S.branch_id='$branch_id'
                  AND SCM.year='$year'";
                                        $stuviewresultclzwise=mysql_query($stuviewclzwise)or die("error in
stuviewclzwise part:".mysql_error());
?>
      <div class="x title">
      <div class="row">
              <div class="col-md-9">
```

```
<center><h3 style="font-family:Britannic Bold;color:#A72E37">&nbsp; &nbsp;
                   
      <u> Report of Students' Details - Class wise </u></h3></center>
   </div>
   <div class="col-md-3">
    style="font-family:Britannic
       <td
            colspan="2"
                                            Bold;color:#A72E37">
<center> Description </center> 
      Branch 
       >
         <?php
           $sqlbnc="SELECT *
              FROM 'branches'
              WHERE branch_id='$branch_id'";
                      $resetbnc=mysql_query($sqlbnc)or die ("error in sqlbnc:".
mysql_error() );
           \\ snowbnc = (mysql\_fetch\_assoc(\\ snowbnc));
           echo $rowbnc['branch_name'];
       Class Type 
       <php echo $class_type ;?> 
      Year 
       <php echo $year;?>
```

```
</div>
 </div>
 </div>
 <?php
echo'
<thead>
Student ID 
  Student Name 
  DOB 
  Gender 
  Parent ID 
   Registered Date 
  Branch ID 
</thead>
 ';
 while($row5=mysql_fetch_assoc($stuviewresultclzwise))
{
echo'
 '.$row5['student_id'].'
  '.$row5['student_name'].'
   '.$row5['dob'].'
   '.$row5['gender'].'
  '.$row5['parent_id'].'
'.$row5['registered_date'].'
'.$row5['branch_id'].'';
echo'';
echo'
```

```
';
if(!isset($_GET['pr'])){//if get print
echo '<hr> ';
  echo
href="print.php?pr=reportajaxpage.php&option=loadstudentdetailclasswise&class_type='.$cla
ss_type.'&year='.$year.'&branch_id='.$branch_id.'" target="_blank">
      <button type="button" name="btnprint" id="btnprint" class="btn btn-success fa fa-
edit">Print</button>
</a>';
}// end print }
//end studentdetail class wise -----
Log out
In this coding session_destroy(); destroys all of the data.
<?php
include('confic.php');
if (!isset($_SESSION)){
  session_start();
session_destroy();
header('location:index.php');
?>
```

APPENDIX G - CLIENT CERTIFICATE



Urumpirai Kids' Park

Model Pre-school Do Right Be Bright

உரும்பிராய் கிட்ஸ் பார்க்

A nonprofit making service organization

GNANAVIRAVA SWAMY KOVIL KOAD. DRUMPIKAL

30,10/2017

BIT Coordinator,

University of Colombo School of Computing,

Colombo - 07.

Dear Sir/Madam,

LETTER OF CLARIFICATION

This is to clarify that Miss, Sangeetha Ariyathasan successfully designed and developed an online Pre-school management system for Urumpirai Kids' Park. The project was undertaken by her partial fulfillment of a requirement for the Bachelor of Information Technology Degree Program.

The system fully satisfies with our requirements and this system, web based management system would be useful to us and parents. From this system we can manage students, staff, students' marks, students' attendance and parents can be able to view their kid's details, marks and events. This can enhance our relationship with parents. I have pleasure to commend that the system developed by Miss.Sangeetha.Ariyathasan fulfills the requirements of the institution.

This commendation is issued at the request of Miss.Sangeetha.Ariyathsan.

Thanking you.

Yours faithfully,

URUMPIRAL KIDS' PARK URUMPIRAL

 President
 A. Panchalingam
 021-223-075

 Secretary
 M. Sritharan
 077-711-0186

 Treasurer
 (Ms) M.Selvakamar
 077-006271

021-223-0754 / 077-656-5258 077-711-0186

GLOSSARY

Apache - is an open source web server. Mostly for UNIX, Linux and Solaris platforms.

CSS (Cascading Style Sheet) - is a style sheet language used to describe the presentation semantics (the look and formatting) of a document written in a mark-up language.

Database - is an organized collection of data for one or more purposes, usually in digital form.

Domain - is knowledge about the environment in which the target system operates.

Firewall - is a solution that is used to enforce security policies. This can be a Hardware or Software.

Graphical User Interface - is a type of user interface that allows users to interact with electronic devices with images rather than text commands.

Internet - is a global system of interconnected computer networks that use the standard Internet Protocol Suite (TCP/IP) to serve billions of users worldwide.

Iterative and Incremental Development - is a cyclic approach to software development in which activities are repeated in a structured manner and the software is developed in increments.

JavaScript - is a prototype-based, object-oriented client-side scripting language that is dynamic It is also considered as a functional programming language.

JQuery- is a cross-browser JavaScript library designed to simplify the client-side scripting of HTML.

Object Oriented Development - is a standard approach to software development based on objects and its instances.

PHP Hyper-text Pre-processor (PHP) - is a server-side programming language.

Rapid Application Development (RAD) - is a software development methodology that uses minimal planning in favor of rapid prototyping.

Structured Query Language - is a database computer declarative language designed for managing data in relational database management systems (RDBMS).

Unified Modeling Language (UML) - is a standardized general-purpose modeling language in the field of object-oriented engineering. This includes a set of graphic

notation techniques to create visual models of object-oriented software-intensive systems.

Web Browser - is a software which allows the user to access WWW.

WWW (**World Wide Web**) - is a system of interlinked hypertext documents accessed via the Internet.