
Major Project Report

On

ONLINE ATTENDANCE MANAGEMENT SYSTEM

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In fulfilment for the award of the degree of

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In

Computer Science Engineering



**Rajiv Gandhi University of Knowledge
Technologies**

(Catering the Educational Needs of Gifted Rural Youth of A.P)

R.K Valley , Y.S.R Kadapa(Dist)-516330

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(Catering The Educational Needs of the Gifted Rural Youth of A.P)

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CERTIFICATE

Certified that the major project report on, “**ONLINE ATTENDANCE MANAGEMENT SYSTEM**” in the domain of **WEB DEVELOPMENT** is bonafide work of **D.Praneetha(R170568),M.Sravani (R170569),G.Chandra sekhar(R170593)** 4th Year B.Tech, Computer Science Engineering in R.K Valley Campus of Rajiv Gandhi University of Knowledge Technologies (RGUKT), Andhra Pradesh carried out during November 2022 to April 2023.

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Abstract

Student attendance management system deals with the maintenance of the student's attendance details. It generates the attendance of the student on basis of presence in class. It is maintained on the daily basis of their attendance. The staffs will be provided with the separate username & password to make the student's status. The staffs handling the particular subjects responsible to make the attendance for all students. Only if the student present on that particular period, the attendance will be calculated. The students attendance reports based on weekly and consolidate will be generated.

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1. Introduction

In this technical era information plays vital role in any once life. Likewise for a University sharing of the features, placements, faculty, student's achievements, location etc. are important and this can be achieved easily by maintaining a website because it will be available throughout the globe and updating of the website lets include the new features and new data so that everyone can see the same.

This website is user friendly and responsive that is whatever the size the viewing experience makes to comfortable to look in to it. Basically websites gives best experience in the laptops, desktops but making the site as responsive the same thing can be achieved through the small size screens like tablets, mainly phones.

This website enhances the popularity of the college within less time as it is available over the internet because many of them now a day's most of the people first prefer to check details and visit later on.

The system allows admin to updates the events quickly in online notice board and those are reflected on user side so user can get updates .In this website the admin no need to worry on data by single click admin can update events and more. It uses PHP and MySQL database. It has two modules i.e.

Admin:

Admin is the super user of the website who can manage everything on the website. Admin can log in through the login page and can manage whole website for example he can update events on login.

User:

User can visit the application through a URL.

1.1 Purpose

"Attendance Management System" is software developed for maintaining the attendance of the student on the daily basis in the collage. Here the staffs, who are handling the subjects, will be responsible to mark the attendance of the students. Each staff will be given with a separate username and password based on the subject they handle. An accurate report based on the student attendance is generated here. This system will also help in evaluating attendance eligibility criteria of a student. Report of the student's attendance on weekly and monthly basis is generated.

1.2 System Scope

Scope of the software:-

- Shows the attendance of every subjects
- Displays students attendance
- shows the attendance percentage
- Lists the short attendance students

2. System Study

This chapter deals with the analysis of the system proposed by our guide. It covers the features, advantages and disadvantages of both the system.

2.1 Existing System

The Existing system is a manual entry for the students. Here the attendance will be carried out in the hand written registers. It will be a tedious job to maintain the record for the user. The human effort is more here. The retrieval of the information is not as easy as the records are maintained in the hand written registers. This application requires correct feed on input into the respective field. Suppose the wrong inputs are entered, the application resist to work. so the user find it difficult to use.

2.2 Disadvantages

- Not flexible
- Data may not be perfect human error
- Manual work required

2.3 Proposed System

To overcome the drawbacks of the existing system, the proposed system has been evolved. This project aims to reduce the paper work and saving time to generate accurate results from the student's attendance. The system provides with the best user interface. The efficient reports can be generated by using this proposed system.

2.3.1 Economical feasibility

Development of this application is highly economically feasible. The only thing to be done is making an environment with an effective supervision. It is cost effective in the sense that has eliminated the paper work completely. The system is also time effective because the calculations are automated which are made at the end of the month or as per the user requirement.

2.3.2 Technical feasibility

The technical requirement for the system is economic and it does not use any other additional Hardware and software. Technical evaluation must also assess whether the existing systems can be upgraded to use the new technology and whether the organization has the expertise to use it. Install all upgrades framework into the .Net package supported widows based application. this application depends on Microsoft office and intranet service ,database. Enter their attendance and generate report to excel sheet.

2.3.3 Operational feasibility

The system working is quite easy to use and learn due to its simple but attractive interface. User requires no special training for operating the system. Technical performance include issues such as determining whether the system can provide the right information for the Department personnel student details, and whether the system can be organized so that it always delivers this information at the right place and on time using intranet services. Acceptance revolves around the current system and its personnel.

2.4 Overview of Software

APACHE

The Apache HTTP Server Project is an effort to develop and maintain an open-source HTTP server for modern operating systems including UNIX and Windows. The goal of this project is to provide a secure, efficient and extensible server that provides HTTP services in sync with the current HTTP standards. The Apache HTTP Server was launched in 1995 and it has been the most popular web server on the Internet since April 1996. It has celebrated its 20th birthday as a project in February 2015.

PHP

- PHP stands for PHP: Hypertext Preprocessor.
- PHP is a server-side scripting language, like ASP.
- PHP scripts are executed on the server.
- PHP supports many databases (MYSQL, Informix, Oracle, Sybase, Solid, Generic ODBC, etc.).
- PHP is an open source software.
- PHP is free to download and use.

MYSQL

- MYSQL is a database server
- MYSQL is ideal for both small and large applications
- MYSQL supports standard SQL
- MYSQL compiles on a number of platforms
- MYSQL is free to download and use
- How to access MySQL:

□ <http://localhost/phpmyadmin>

2.5 Hardware Specification

User side:

- Not required any hardware.
- Required only internet access and computer.

Server side:

Ram	4GB
Hard disk	1TB
Processor	2.4GHz
Operating System	Server side OS like Unix

2.6 Software Requirement

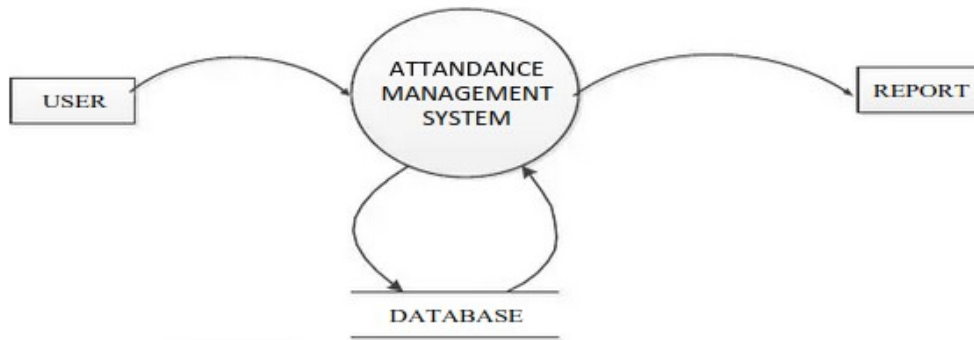
Front End	HTML,CSS ,jquery,java script
Server side Language	PHP
Database Server	MySql
Web Browser	Firefox , Google Chrome or any compatible browser
Operating System	Ubuntu,Windows or any equivalent OS
Software	xampp

3. System Design

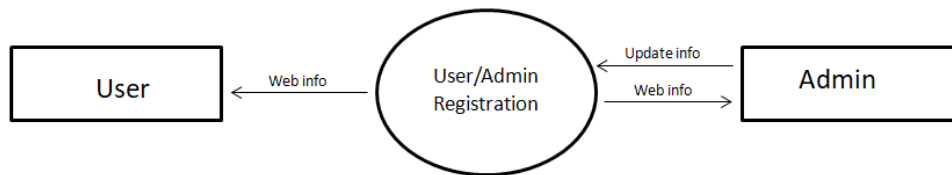
The system design is needed for information processing technology and the user interface development analysis. It contain a high level overview of the organization in which the common activities, processes and products are described in relation to how they create, use and modify information.

Below given dfd's can be used to describe the overall user interface:

3.1 DFD Diagrams



LEVEL- 0 DFD:



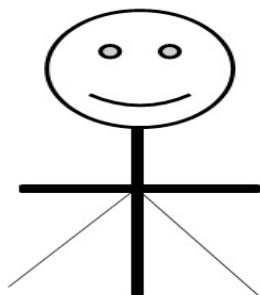
DFD Diagram

3.2 UML Diagrams:

Actor:

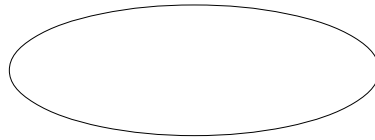
A coherent set of roles that users of use cases play when interacting with the use cases.

An observable result of value of an actor.

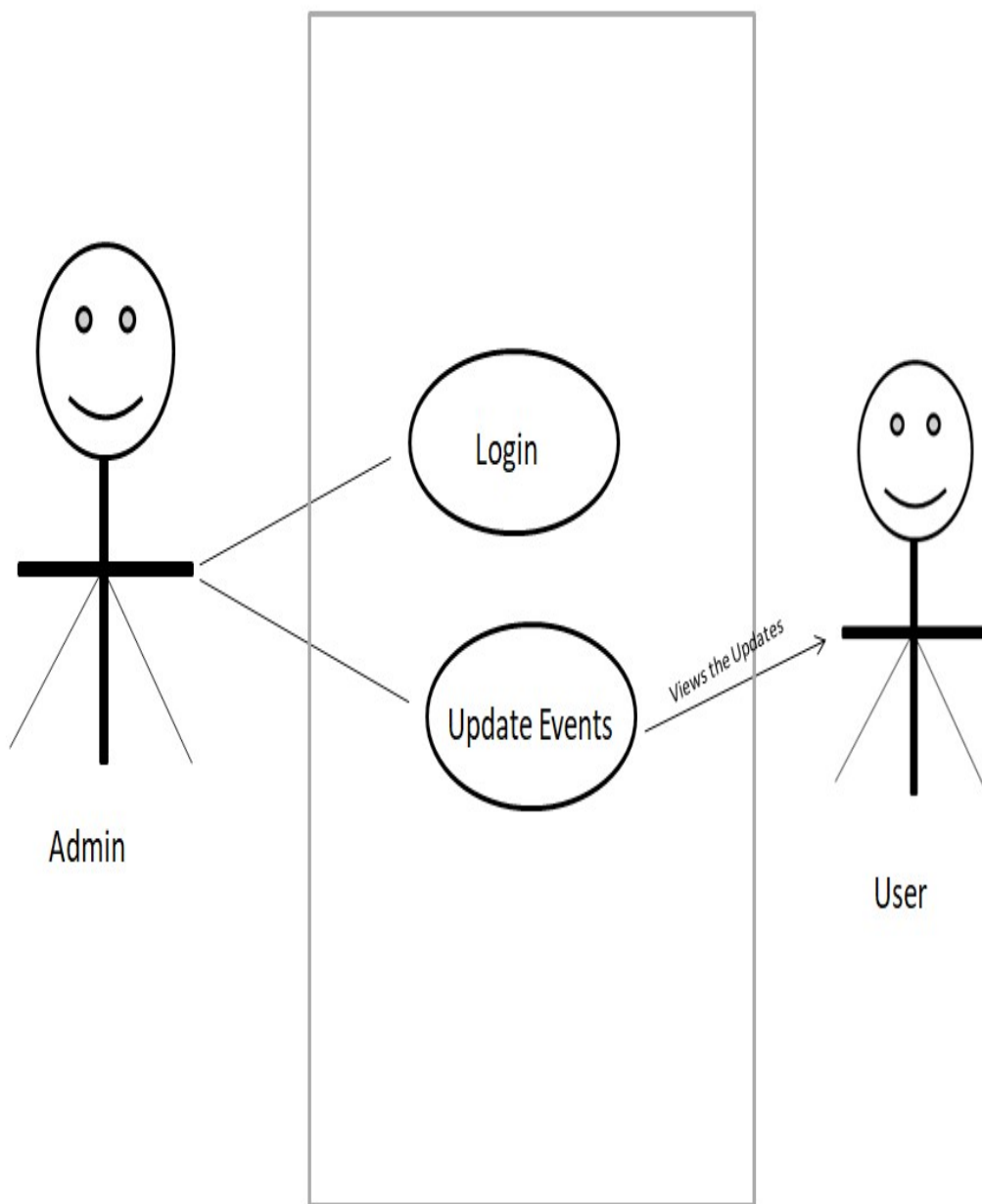


Use case:

A description of sequence of actions, including variants, that a system performs yields an observable result of value of an actor. actor diagram is drawn in a eclipse shape.

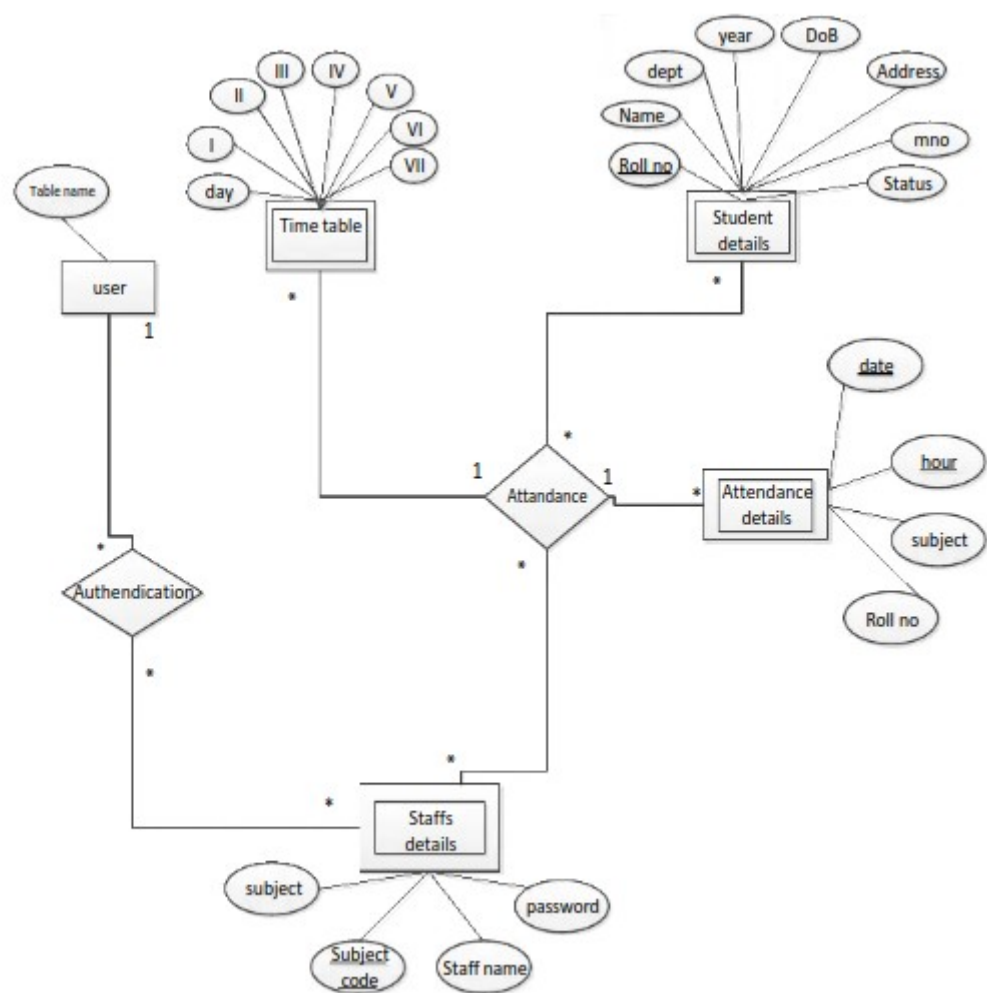


UML stands for Unified Modelling Language. UML is a language for specifying, visualizing and documenting the system. This is the step while developing any product after analysis. The goal from this is to produce a model of the entities involved in the project which later need to be built. The representation of the entities that are to be used in the product being developed need to be designed.



Use Case Diagram

3.3 Entity Relationship Diagram



4. System Testing

System testing is normally carried out in a planned manner according to the system test plan document. The system test plan identifies all testing-related activities that must be performed, specifies the schedule of testing, and allocates resources. It also lists all the test cases and the expected outputs for each test case. Here the modules are integrated in a planned manner.

4.1 Functional Testing

Functional testing refers to tests that verify a specific action or function of the code. These are usually found in the code requirements documentation, although some development methodologies work from use cases or user stories. Functional tests tend to answer the question of "can the user do this" or "does this particular feature work". Some examples of functional testing done in our project:

- By checking all the login modules, it is ensured that only registered users can access all the facilities.
-

4.2 Structural Testing

Structural testing is also called White box testing. This means a testing technique whereby explicit knowledge of the internal workings of the item being tested is used to select the test data. White box testing uses specific knowledge of programming code to examine outputs. The test is accurate only if the tester knows what the program is supposed to do. He or she can then see if the program diverges from its intended goal. White box testing does not account for errors caused by omission, and all visible code must also be readable.

4.3 System Testing

System testing of software or hardware is testing conducted on a complete, integrated system to evaluate the system's compliance with its specified requirements. System testing falls within the scope of black box testing, and as such, should require no knowledge of the inner design of the code or logic.

As a rule, system testing takes, as its input, all of the "integrated" software components that have successfully passed integration testing and also the software system itself integrated with any applicable hardware system(s). The purpose of integration testing is to detect any inconsistencies

between the software units that are integrated together (called assemblages) or between any of the assemblages and the hardware. System testing is a more limiting type of testing; it seeks to detect defects both within the "inter-assemblages" and also within the system as a whole.

System testing is performed on the entire system in the context of a Functional Requirement Specification(s) (FRS) and/or a System Requirement Specification (SRS). System testing is an investigatory testing phase, where the focus is to have almost a destructive attitude and tests not only the design, but also the behaviour and even the believed expectations of the customer. It is also intended to test up to and beyond the bounds defined in the software/hardware requirements specification(s).

4.3.1 Test Cases

A test case in software engineering is a set of conditions or variables under which a tester will determine whether an application or software system is working correctly or not.

Unit Test Cases

The software is being divided into different components and unit testing is performed on each of these modules. This section is repeated for all components.

Integration Test cases

Integration testing is a part of stress testing which involves integrating the components to create a system or sub-system. It may involve testing an increment to be delivered to the customer. In integration testing, the test team has access to the system source code. The system is tested as components are integrated.

Validation Test cases

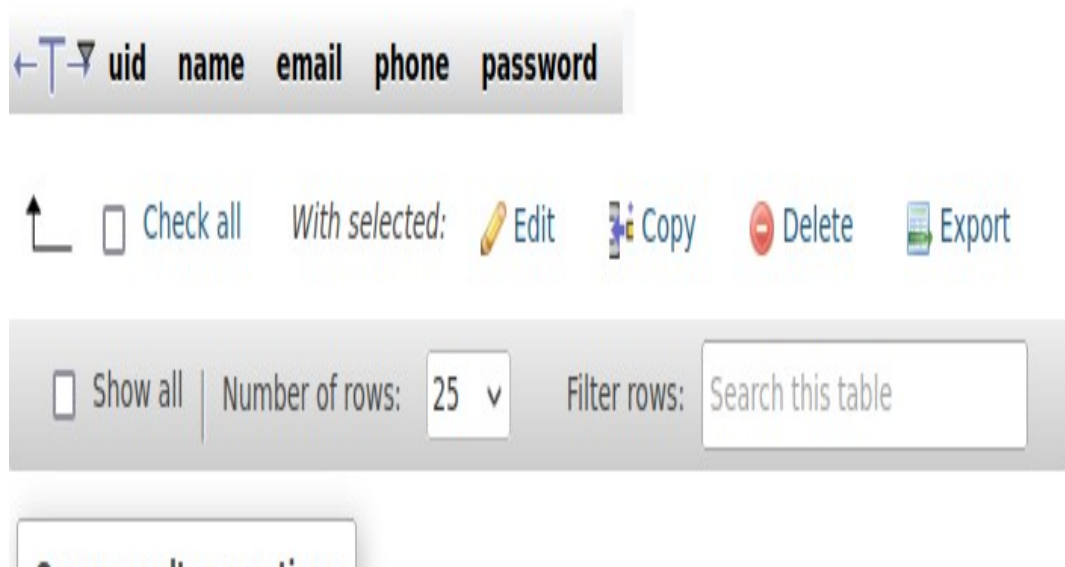
This testing is done to see whether the integrated software is valid according to the user needs.

5. Database Schema

The goal of database design is to ensure that the data is represented in such a way that there is no redundancy and no extraneous data is generated, thus generate relationship in as high an order as possible. Having identified all the data on the system it is necessary to at the logical database design. Database design involves designing the conceptual model of the database. This model is independent of the physical representation of the data. Once the conceptual model is designed, it can be mapped to the DBMS/RDBMS that is actually being used.

Following are tables that have been used in this project:-

Table 1: Faculty Table



←↑↓	uid	name	email	phone	password
-----	-----	------	-------	-------	----------

↑ ☐ Check all With selected: Edit Copy Delete Export

☐ Show all Number of rows: 25 ▼ Filter rows:

Table 2: Faculty Details













		uid	name	email	phone	password
<input type="checkbox"/>	 Edit  Copy  Delete	2	Reddy	nallagatlareddy@gmail.com	7032180642	123456
<input type="checkbox"/>	 Edit  Copy  Delete	3	Prani	pranireddy@gmail.com	9121345667	123456
<input type="checkbox"/>	 Edit  Copy  Delete	4	Sravs	sravs@gmail.com	9121345689	1234567
<input type="checkbox"/>	 Edit  Copy  Delete	5	chandu	chandra@gmail.com	7654893245	12345678

Table 3: Students table

























	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	uid 	int(11)			No	None		AUTO_INCREMENT	 Change  Drop
<input type="checkbox"/>	2	teacher_uid	int(11)			No	None			 Change  Drop
<input type="checkbox"/>	3	code	varchar(50)	latin1_swedish_ci		No	None			 Change  Drop
<input type="checkbox"/>	4	year	varchar(10)	latin1_swedish_ci		No	None			 Change  Drop
<input type="checkbox"/>	5	section	varchar(50)	latin1_swedish_ci		No	None			 Change  Drop
<input type="checkbox"/>	6	object	longblob			No	None			 Change  Drop

Table 4: Students Details

		uid	teacher_uid	code	year	section	object
<input type="checkbox"/>	 Edit  Copy  Delete	1		1 EPI-123	2023	2	[BLOB - 5.8 KiB]
<input type="checkbox"/>	 Edit  Copy  Delete	2		6 CCC-123	2023	1	[BLOB - 5.8 KiB]
	<input type="checkbox"/> Check all	With selected:		 Edit	 Copy	 Delete	 Export

6 Conclusion

6.1 Conclusion

To conclude, Project Data Grid works like a component which can access all the databases and picks up different functions. It overcomes the many limitations incorporated in the attendance.

- Easy implementation Environment
- Generate report Flexibly

6.2 Scope for future development

The project has a very vast scope in future. The project can be implemented on internet in future. Project can be updated in near future as and when requirement for the same arises, as it is very flexible in terms of expansion. With the proposed software of database Space Manager ready and fully functional the client is now able to manage and hence run the entire work in a much better, accurate and error free manner. The following are the future scope for the project.

- Discontinue of particular student eliminate potential attendance.
- Bar code Reader based attendance system.
- Individual Attendance system With photo using Student login.

7.Source Code

Students.php

```
<html>
<head>
  <link rel="stylesheet" href="css/style.css"/>
  <title>Student Attendance</title>
  <link rel="stylesheet" href="css/bootstrap.min.css">
  <link rel="stylesheet" href="css/bootstrap-theme.min.css">
  <link rel="stylesheet" href="css/c3.css">
  <script src="js/jquery.min.js"></script>
  <script src="js/bootstrap.min.js"></script>
  <script src="js/highcharts.js"></script>
  <script src="js/highcharts-exporting.js"></script>
  <script src="js/jquery.knob.js"></script>
  <script src="js/student.js"></script>
  <!-- Custom styles for this template -->
  <link href="navbar-fixed-top.css" rel="stylesheet">
</head>
<body>
  <!-- Fixed navbar -->
  <nav class="navbar navbar-inverse navbar-fixed-top">
    <div class="container">
      <div class="navbar-header">
        <button type="button" class="navbar-toggle collapsed" data-
toggle="collapse" data-target="#navbar" aria-expanded="false" aria-
controls="navbar">
          <span class="sr-only">Toggle navigation</span>
          <span class="icon-bar"></span>
          <span class="icon-bar"></span>
          <span class="icon-bar"></span>
        </button>
        <a class="navbar-brand" href="index.php">Online
Attendance</a>
      </div>
      <div id="navbar" class="navbar-collapse collapse">
        <ul class="nav navbar-nav navbar-right">
          <li class="active"><a href="#">Home</a></li>
          <li><a href="#about">About</a></li>
          <li><a href="contact.html">Contact</a></li>
```

Teacher.php

```
<?php
    session_start();
    $isIndex = 0;
    if(!(array_key_exists('teacher_id',$_SESSION)      &&
isset($_SESSION['teacher_id']))) {
        session_destroy();
        if(!$isIndex) header('Location: index.php');
    }
?>
<?php include 'php/node_class.php'; ?>
<html>
<head>
    <link rel="stylesheet" href="css/style.css"/>
    <title>Teacher Dashboard</title>
    <link rel="stylesheet" href="css/bootstrap.min.css">
    <link rel="stylesheet" href="css/bootstrap-theme.min.css">
    <script src="js/jquery.min.js"></script>
    <script src="js/bootstrap.min.js"></script>
    <script src="js/teacher.js"></script>
    <!-- Custom styles for this template -->
    <link href="navbar-fixed-top.css" rel="stylesheet">
</head>
<body>
    <!-- Fixed navbar -->
    <nav class="navbar navbar-inverse navbar-fixed-top">
        <div class="container">
            <div class="navbar-header">
                <button type="button" class="navbar-toggle collapsed" data-
toggle="collapse" data-target="#navbar" aria-expanded="false" aria-
controls="navbar">
                    <span class="sr-only">Toggle navigation</span>
                    <span class="icon-bar"></span>
                    <span class="icon-bar"></span>
                    <span class="icon-bar"></span>
                </button>
                <a class="navbar-brand" href="index.php">Online
Attendance</a>
            </div>
```

```

<div id="navbar" class="navbar-collapse collapse">
  <ul class="nav navbar-nav navbar-right">
    <li class="active"><a
href="teacher.php">Dashboard</a></li>
    <li><a href="profile.php">Profile</a></li>

    <li><a href="statistics.php">Statistics</a></li>
    <li><a href="#about">About</a></li>
    <li><a href="contact.html">Contact</a></li>
    <li><a href="logout.php">Logout</a></li>

  </ul>
</div><!--/.nav-collapse -->
</div>
</nav></br></br></br></br>

<div class="container">
  <?php
    $name = $_SESSION['name'];
    $classes = $_SESSION['classes'];
    $teacher_id = $_SESSION['teacher_id'];
    echo '<h2>Welcome , '.$name.'.</h2>';
    echo '<div class="wrapper">';
    // FOR EACH CLASS , GET IT'S INFO AND PREPARE A LINK
    $n = new Node;

    if(!$classes) {
      echo '<h3 class="no-classes">You haven\'t taken any class yet!
</h3>';
    } else {
      echo '<h3 class="no-classes">Click on a class to take
attendance.</h3>';
      foreach($classes as $class_id) {
        $node = $n->retrieveObjecti($class_id,$teacher_id) or die("No
such record");
        $code = $node->getCode();
        $section = $node->getSection();
        $year = $node->getYear();
        $numClasses = $node->getDays();
        $link = 'take.php?cN='.$class_id;
        echo '<div class="class">
          <button class="btn btn-danger delete-class-warning" data-
toggle="modal" data-target=".delete-warning">&times;</button>

```

```

        <a class="no-decoration" href=" ".$link.">
            <div><strong>Code</strong> : <span class="code">'.
$code.'</span></div>
            <div><strong>Section</strong> : <span class="section">'.
$section.'</span></div>
            <div><strong>Year</strong> : <span class="year">'.
$year.'</span></div>
            <div><strong>Classes</strong> : '.$numClasses.'</div>
        </div></a>;
    }
}
    echo '<div class="class" data-toggle="modal" data-target=".bs-
example-modal-lg" id="addClass">
        <span class="glyphicon glyphicon-plus"></span>
    </div>
</div>';
?>

</div>
<div class="modal fade bs-example-modal-lg" tabindex="-1"
role="dialog" aria-labelledby="addClass" aria-hidden="true">
    <div class="modal-dialog modal-lg">
        <div class="modal-content">
            <h2 class="text-center"> Add Class </h2>
            <hr>
            <div id="add_class_form">
                <select class="form-control" name="year">
                    <?php foreach(range(date('Y',time()),1983) as $r) echo
'<option>'.$r.'</option>'; ?>
                </select>
                <input class="form-control" name="code"
placeholder="Code , Eg : COE-322">
                <select class="form-control" name="section">
                    <option value="-1">Choose Section</option>
                    <?php foreach(range(1,3) as $r) echo
'<option>'.$r.'</option>'; ?>
                </select>
                <select class="form-control" name="semester">
                    <option value="-1">Choose Semester</option>
                    <?php foreach(range(1,8) as $r) echo
'<option>'.$r.'</option>'; ?>
                </select>

```

```

        <input class="form-control" name="start"
placeholder="Starting Roll Number (Eg. 201/CO/12)">
        <input class="form-control" name="end"
placeholder="Ending Roll Number (Eg. 265/CO/12)">
        <button class="btn btn-primary" id="add">Add
Class</button>
        <button class="btn" id="cancel">Cancel</button>
    </div>
</div>
</div>
</div>
<div class="modal fade delete-warning" tabindex="-1" role="dialog"
aria-labelledby="delete-warning" aria-hidden="true">
    <div class="modal-dialog modal-sm">
        <div class="modal-content">
            <h2 class="text-center"> Do you really want to delete <br>
<span class="warning-class"></span> ?</h2>
            <hr>
            <div class="text-center">
                <p>
                    Are you sure you want to delete <span class="warning-
class"></span> ? <br>
                    You can't undo this action.
                </p>
                <button class="btn btn-danger
delete-class-code">Delete</button> <button class="btn btn-primary"
onclick="$($('.delete-warning').modal('hide'));">Cancel</button>
            </div>
        </div>
    </div>
</div>
</body>
</html>

```


8. List of Figures

The screenshot shows a web browser window with the URL `localhost/online-attendance-system-in-php-master/index.php`. The page has a dark header with the text "Online Attendance" and navigation links "Home", "About", and "Contact". Below the header, there is a link "Click here for [Student Dashboard](#)". The main content area is titled "For Faculty" and contains two forms: "Login" and "Sign Up".

Login Form:

- Email ID:** Input field with placeholder "Email".
- Password:** Input field with placeholder "Password".
- Login:** A blue button to submit the login form.

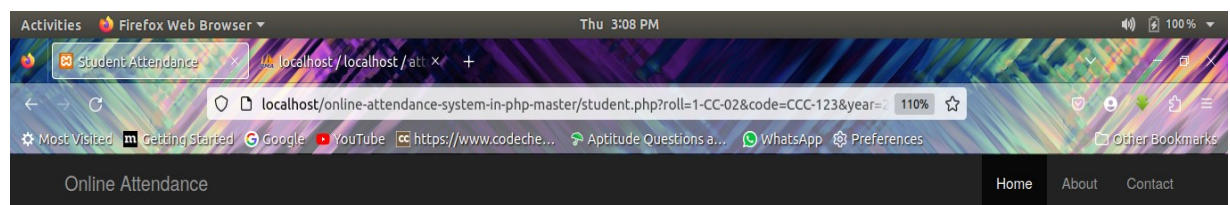
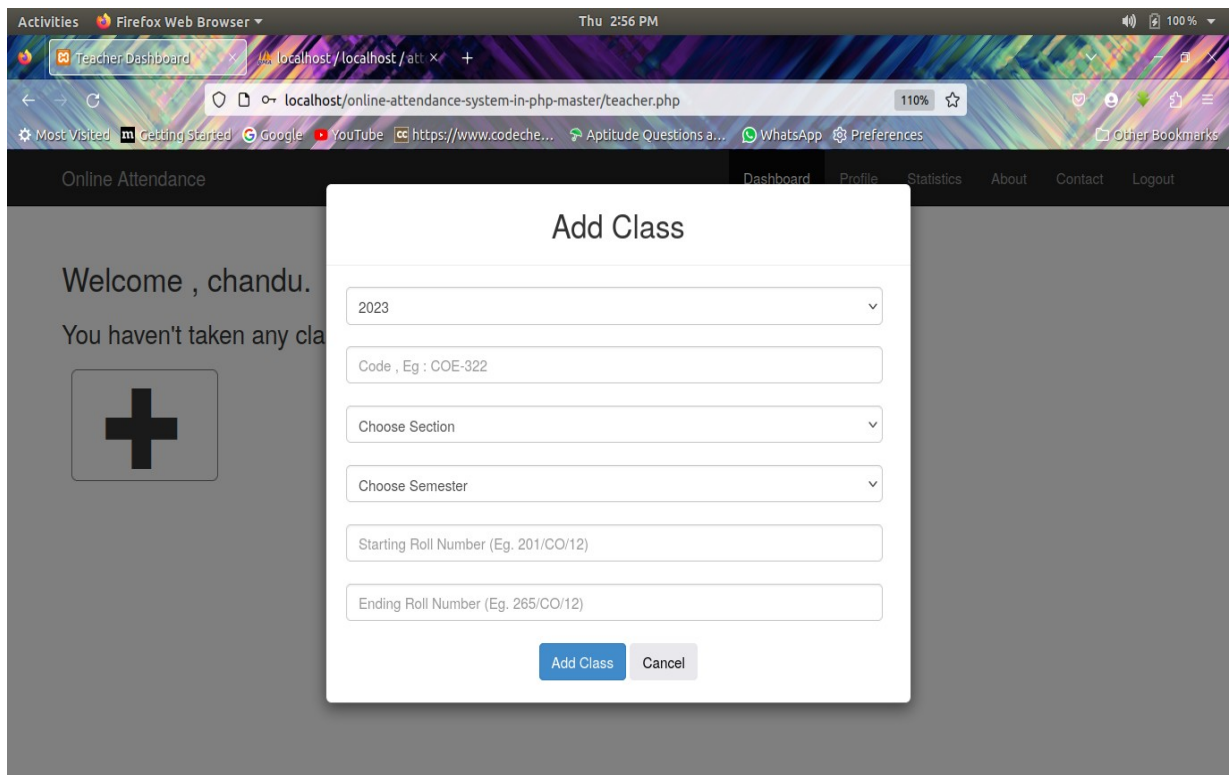
Sign Up Form:

- Name:** Input field with placeholder "Name".
- Phone Number:** Input field with placeholder "Phone".
- Email ID:** Input field with placeholder "Email".
- Password:** Input field with placeholder "Password". Below this field is a note: "Password should be 6 characters long."
- Re-type Password:** Input field for confirming the password.

The screenshot shows a web browser window with the URL `localhost/online-attendance-system-in-php-master/student.php`. The page has a dark header with the text "Online Attendance" and navigation links "Home", "About", and "Contact". The main content area contains a registration form for students.

Registration Form:

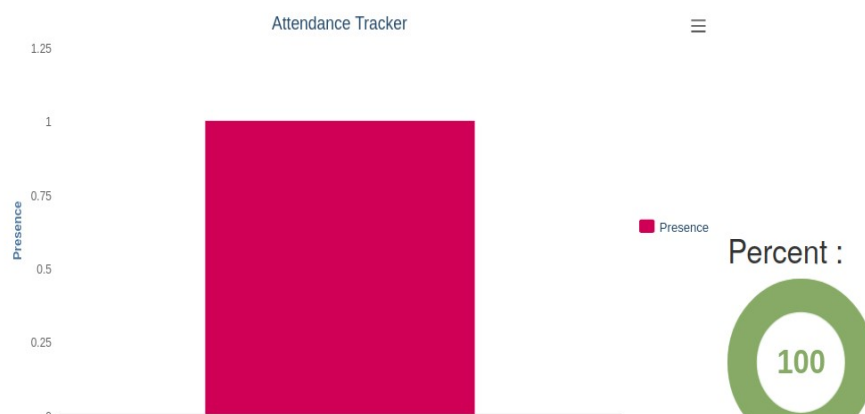
- Year of course:** A dropdown menu with "2023" selected.
- Section:** A dropdown menu with "1" selected.
- Subject Code of Course:** An input field with the placeholder "Eg - COE-216". Below this field is a note: "DDD-NNN where D : Department , N : Number".
- Roll Number:** An input field with the placeholder "Eg - 262/CO/12". Below this field is a note: "NNN/DD/YY where N : Number, D : Department , Y : Year".
- Get Results:** A blue button to submit the registration form.

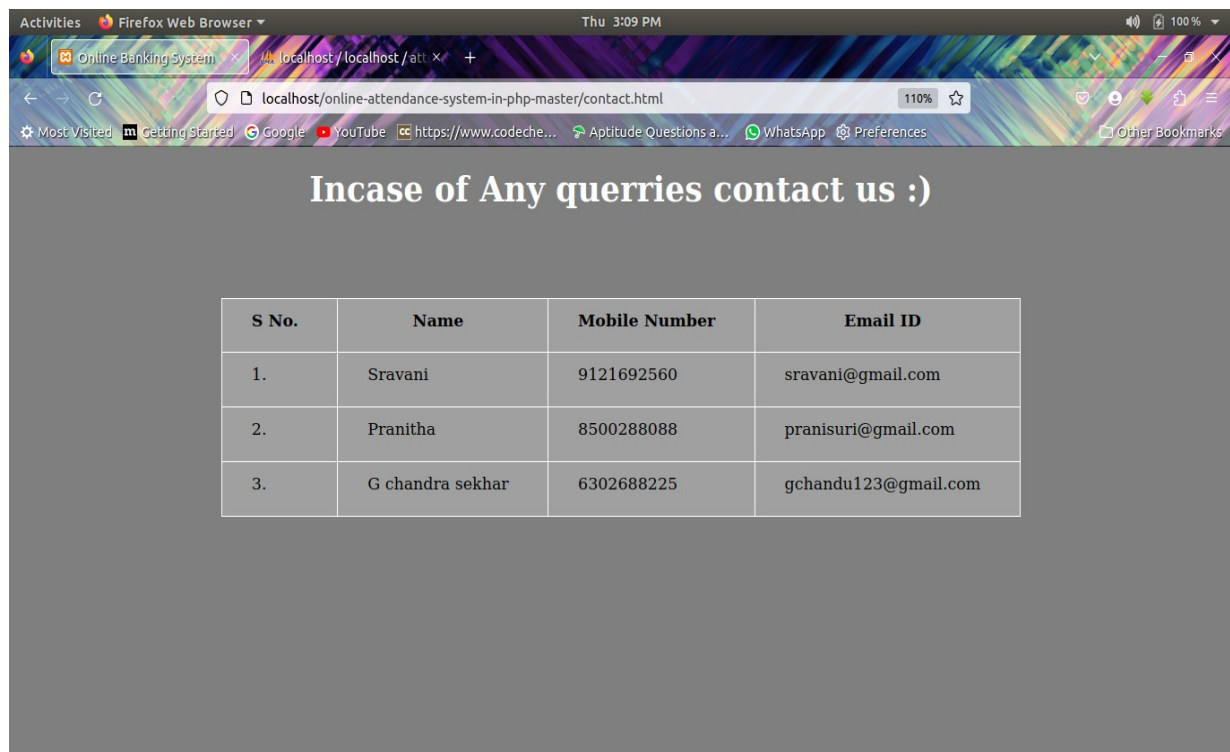


Teacher : chandu

Subject : CCC-123

Total Classes : 1





9. References

For HTML, CSS, Javascript :

<https://www.w3schools.com/html/default.asp>

<https://www.w3schools.com/css/default.asp>

<https://www.w3schools.com/js/default.asp>

<https://www.youtube.com/c/Freecodecamp>

For PHP:

<https://www.w3schools.com/php/default.asp>

<https://www.sitepoint.com/php/>

<https://www.php.net/>

For MySQL:

<https://www.mysql.com/>

<http://www.mysqltutorial.org>

For XAMPP:

<https://www.apachefriends.org/download.html>

Udemy:

The Complete 2022 Web Development Bootcamp-Dr. Angela Yu

LinkedIn Learning:

Become a Full-Stack Web Developer

Github Link

<https://github.com/prani287/OnlineAttendanceManagementSystem>

*****THANKYOU*****
