A PROJECT REPORT

ON

"LEAVE MANAGEMENT SYSTEM FOR AIKTC"

Submitted to

UNIVERSITY OF MUMBAI

In Partial Fulfilment of the Requirement for the Award of

BACHELOR'S DEGREE IN
COMPUTER ENGINEERING

BY

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Plot No. 2 3, Sector - 16, Near Thana Naka,
Khandagaon, New Panvel - 410206

2019-2020

AFFILIATED TO

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CERTIFICATE

This is certify that the project entitled

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is a record of bonafide work carried out by them, in the partial fulfilment of the requirement for the award of Degree of Bachelor of Engineering (Computer Engineering) at ***Anjuman-I-Islam's Kalsekar Technical Campus, Navi Mumbai*** under the University of MUMBAI. This work is done during year 2019-2020, under our guidance.

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Project I Approval for Bachelor of Engineering

This project entitled ***Ëeave Management System For AIKTC¨*** by ***Khalfe Aynas Abdul Majid Zeenat, Choudhary Nameera Ajaz Ruksana, Khan Yaman Mohammad Ali Nasreen Fatima*** is approved for the degree of ***Bachelor of Engineering in Department of Computer Engineering.***

Examiners

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2. .....

Supervisors

1. .....
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Chairman

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Declaration

We declare that this written submission represents our ideas in our own words and where others ideas or words have been included, We have adequately cited and referenced the original sources. We also declare that We have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in our submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

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ABSTRACT

In the existing leave record management system, every college/department follows manual work in which faculty enters their information in a record book. At the end of each month, Administration Department calculates remaining leaves of every member which is a time consuming task and there are chances of losing data or errors in the records.

This module is a leave management system that is critical for Human Resource tasks and keeps the record of vital information regarding working hours and leaves. In this module, Head of Department (HOD) will have permissions to look after data of every faculty member of their department. HOD can approve leave through this application and can view leave information of every employee. This application can be used in a colleges to reduce processing work load. Leave management application will reduce paperwork and maintain record of the leaves in a more efficient and systematic way.

Keywords: Transparency, Data Integrity, Accruals, Simplicity, E-notifier, Notification Panel, Widget, Auto Update Leave Records, Load Adjustment.

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Chapter 1

Introduction

Our system decreases the paperwork and also enable the process with reliable record maintenance by using centralized database, there will be less chances of losing data and will help you to collect the information about leave details of employees.

1.1 Purpose

In the existing leave record management system, every college/department follows manual work in which faculty enters their leave information in a record book. At the end of each month, Administration Department calculates remaining leaves of every member which is a time consuming task and there are chances of losing data or errors in the records. To eliminate the manual work and the chance of losing data we have designed this system.

1.2 Project Scope

The scope of the project is limited to several processes: handling of employee leave application, managing leave balances, record management administration, load adjustment and it will generate the reports such as leave trends of the organization, employee availability, employee leave balance, leave rejection and leave acceptance. The leave management system is designed in such a way that can be access through any web browser. The leave management system was designed, developed and implemented taking the distinction of the leave of absence policies and types of leaves and the system is exclusively designed and developed for HR Department and the employees leave records can be section particularly. The employee leave section is solely responsible for keeping the leave and related records of employees and keeping track of their information.

1.2.1 Goals

a. In our proposed system, all the data will be backed up. One can simply click and see the information you want at any stage.

b. Leave tracking are done accurately and which will improves discipline in an organization.

c. Leave balance of the employees are calculated automatically.

d. It can avoid errors in the leave balance calculations of the employees.

1.2.2 Objectives

a. The system will show and helps you to collect most of the information about leave details of employees.

b. The system will reduce the manual work and also enable the process with reliable record maintenance by using centralized database, there will be less chances of losing data.

1.3 Organization of Report

Chapter **Introduction** shows how this idea popped up and motivation we got to develop this project. We checked if there any system exist for this problem. We found paper based and computer based system. We studied their advantages, disadvantages and got to know how we can build solution to overcome those disadvantages.

Chapter **Literature Survey** includes summary, advantages, disadvantages and ways we can improve those disadvantages of reference paper we studied. Review of literature helps to understand need of project, how project can improve situations and it helps developers to understand what exactly need to develop. Literature review helps clients to know in what areas project can be used.

Project Planning and SRS chapter is given so that other developers or clients can know what technologies, tools, software and hardware is used. On what hardware or platform developed project can be deployed. The market potential of project, its estimated development cost, expected profit can be known from this chapter.

System design chapter is provided with six diagrams to understand modules, users and architecture of project. Use case diagram is given to understand functionality of a system with users and use cases. Class diagram is provided to understand structure of project. To show relation between different modules Component Diagram is

shown. To describe how and in what order group of objects work sequence diagram is provided. Deployment diagram is provided to describe the physical components, their distribution, and association.

Chapter **Implementation** describes each and every module of project in details. Also to understand interaction logic between object in system sequence diagram is shown. Activity diagram shows control flow from one activity to another. Flow chart for every module is given that shows overall structure of the process or system, traces the flow of information and work through it, and highlights key processing and decision points.

Chapter **System Testing and Screenshots of project** discusses Test cases used for testing the system, to check validation. The results occurred are given in this chapter. The analysis done after development is described here.

Last chapter **Conclusion and Future Scope** describes how we can make project scope more broad. What are the limitations of system and conclusion.

Chapter 2

Literature Survey

2.1 HR e-Leave Tour Management System at RDCIS, SAIL.

Looking at people as assets in part of Human Resource Management and human capital management. For managing and automating the HR process to maximize the productivity of the organization. The organization has to implement HRMS, HRMS system will help in reducing costs, saving time, integrating and aligning HR efforts with the rest of the organization. Employees will be empowered and can have control over their work life. Through HRMS one can quickly build the work flows and processes. The powerfully flexibility features keep employees current and compliant, even as rules and regulations change. for competent of business process, computerization is must in today's scenario.

2.1.1 Advantages of Paper

a. To provide faster employee services and online access to various information of the employees with proper security mechanism.

b. Timely accounting of maintenance activities and availability of online information.

2.1.2 Disadvantages of Paper

a. The first limitation is that in this system, they have two login users.

b. The second limitation is that the whole process of the system is connected to proper mobile network.

2.1.3 How to overcome the problems mentioned in Paper

a. We create only one login for all users and admin.

b. As the internet access should be there in above system which is not possible for all so we will try that our system should work without the internet access.

2.2 Cloud Based Web Application with NFC for Employee Attendance Management System.

The proposed system is using NFC technology by which each individual employees will be able to access this application online and can request for leave as per their needs. This system allows the employees to tap their Android/iOS smart phones to the NFC identification tag to start counting time instead of using the NFC card. There will be no limitation of data sharing and employee number. Web interface and database can be stored on servers with more secure connections and regular backups.

2.2.1 Advantages of Paper

a. The application satisfies all users in terms of navigation, organization, ease of use, design and content.

b. The proposed application offers multiple company accounts each of which has its own company users.

c. Cloud platform has been integrated with their system for more flexibility and lower cost of hardware and software resources.

2.2.2 Disadvantages of Paper

a. The system may not support tracking the working hours of the field employees who often works outside the office such as home service, installation technicians, home health providers, etc.

b. Short range communication in NFC.

2.2.3 How to overcome the problems mentioned in Paper

a. As the system does not support tracking hours of working the better options providing for the company is to allow employee to check in or check out on specified location using their mobile phones.

2.3 E-Notifier Transport Information Services in Colleges and Exploring Mobile Notification.

As we know that there are many mobile platforms available in the market these days, Android OS is the most user-friendly and programmer friendly platform. Android is an Operating System supporting a large no. Of applications in smart phones. These applications makes more comfortable and advanced to use. User should know the basic knowledge of internet and android application.

2.3.1 Advantages of Paper

a. This project is an efficient and user friendly Android mobile application for notifying timetables and important notices.

2.3.2 Disadvantages of Paper

a. The user of this application will be the employee itself and should have the application installed on the smart phone/android device.

2.3.3 How to overcome the problems mentioned in Paper

a. This system mainly aims to minimize the difficulties that the employee face in managing and planning their academic life.

2.4 Technical Review

2.4.1 Web technologies

Web Technologies is a combination of many languages like HTML, CSS, Js, SQL, PHP, Bootstrap etc.

Reason to use web technologies

a. Web Technologies are programming languages such as HTML and CSS, which are well known among IT professionals.

b. They run on the device's own web browser through a simple URL.

c. It run on any operating system.

d. Dynamic and Interactive Web pages.

e. Responsive Websites.

2.4.2 PHP

PHP is a server scripting language, and a powerful tool for making dynamic and interactive Web pages. PHP is a widely-used, free, and efficient alternative to competitors such as Microsoft's ASP. PHP 7 is the latest stable release.

Advantages of PHP

a. The PHP based developed web applications can be easily run on any platform.

b. The on who knows any programming language can easily work on PHP.

c. PHP is easily connected with database and make the connections securely with databases.

Reasons to use this PHP

a. It can interact with many different database languages including MySQL

b. Easy to learn.

c. Interactive features.

d. Low cost and open source.

Chapter 3

Project Planning

3.1 Members and Capabilities

Table 3.1: Table of Capabilities

SR. No	Name of Member	Capabilities
1	Khalfe Aynas	UI Design, PHP
2	Choudhary Nameera	PHP, Database
3	Khan Yaman	UI Design, PHP

3.2 Roles and Responsibilities

Table 3.2: Table of Responsibilities

SR. No	Name of Member	Role	Responsibilities
1	Khalfe Aynas	Co-Team Leader	UI Design, Documentation
2	Choudhary Nameera	Co-Team Leader	Database, Documentation
3	Khan Yaman	Co-Team Leader	UI Design, Documentation

3.3 Assumptions and Constraints

3.3.1 Assumptions:

Assumption is that all information entered by the user will be valid. If any invalid information is found the system will notify an alert to the user. The system is required to store generated reports about user's leave.

3.3.2 Constraints:

The system should generate leave reports of each users correctly.

3.4 Project Management Approach

We have used Spiral methodology for the development of this project. The combination of a waterfall model and iterative model is also called as Spiral Model. Every phase of spiral model begins with the design goal and ends with the client reviewing the progress. The services provided by spiral model of software development satisfies to the dynamic change in requirement of the system. This is the main reason why we chose spiral model for software development as it grants various services like determine objectives, Identify risks, development and test, plan the next iteration and these services can be changed according to the changing environment.

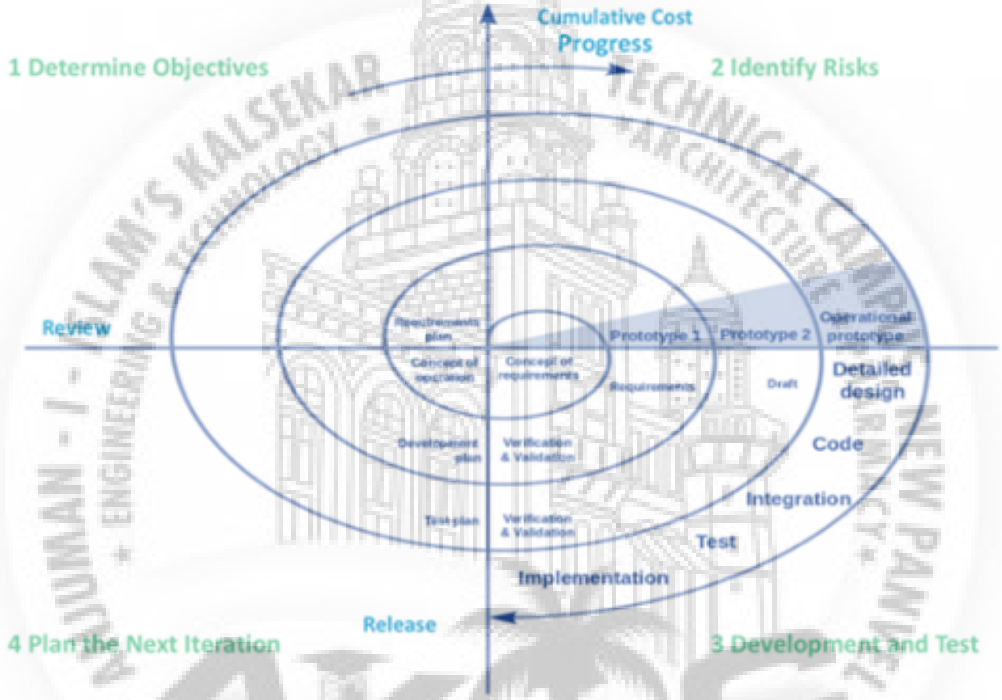


Figure 3.1: Spiral Model

3.5 Ground Rules for the Project

We Consider the following ground rules:

1. Project should also be build from users prospective.
2. We will keep positive attitude towards Project and team members and everyone will respect each other.
3. Everyone will take initiative by sharing ideas telling improvements in each other.
4. We will be honest and take our responsibility , we will try our best to complete our project before deadline .

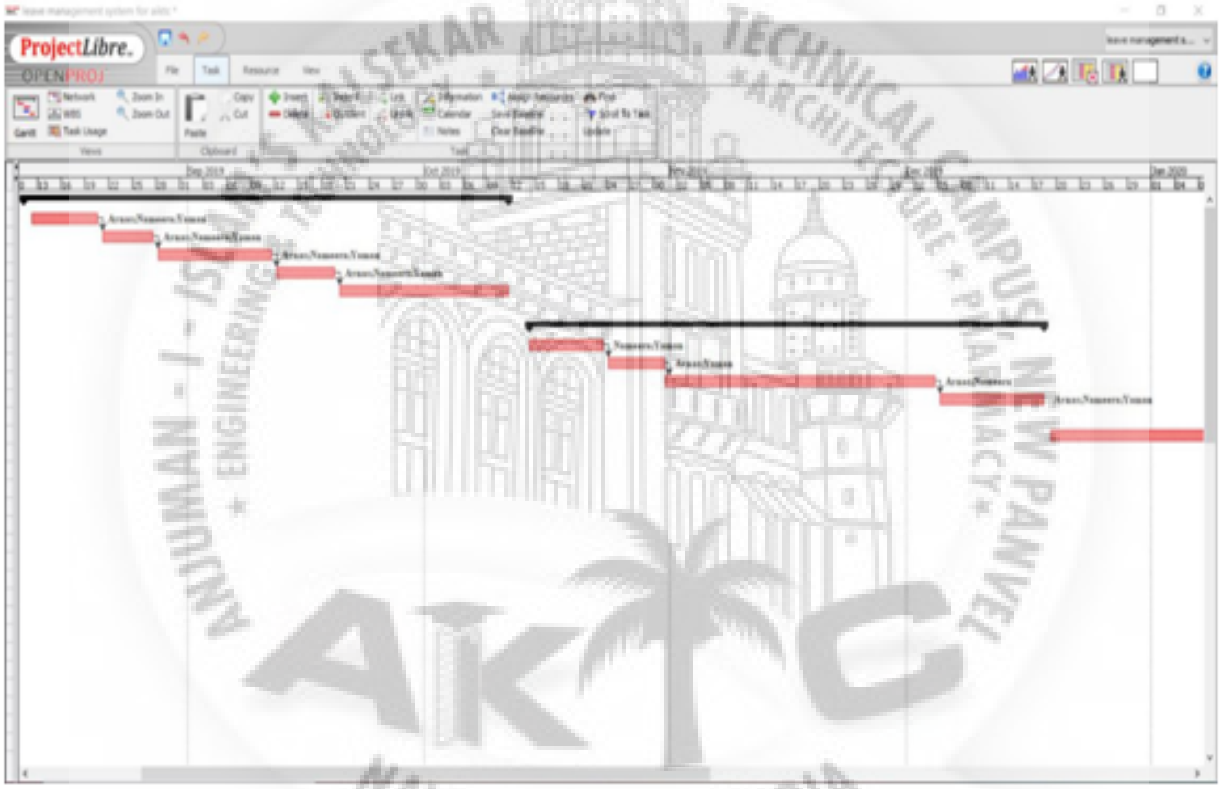
5. If any member got stuck at something he or she should ask for help to one another.

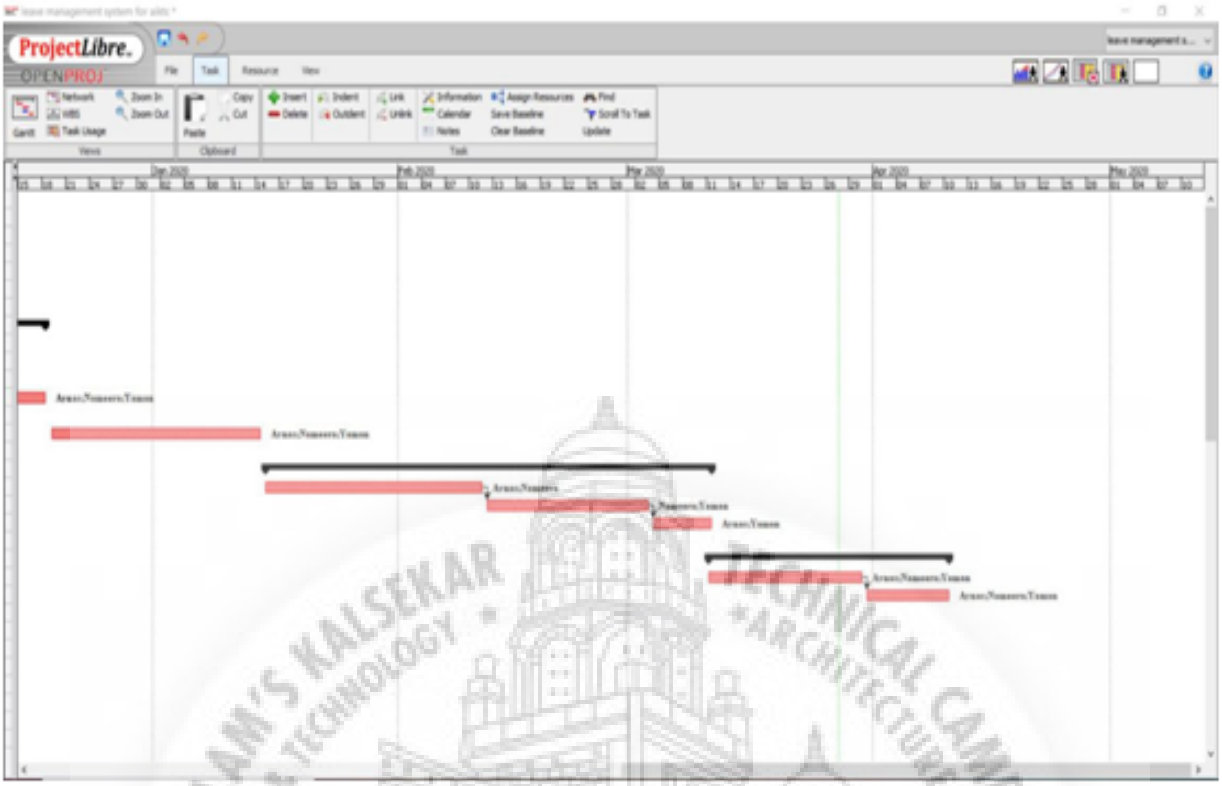
3.6 Project Budget

a. Web technologies : Open Source

b. Python : Open Source

3.7 Project Timeline

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Chapter 4

Software Requirements Specification

4.1 Overall Description

4.1.1 Product Perspective

Leave Management System is a replacement for an ordinary leave management systems which depend on paper work for recording leaves and employees information so our system will replace the ongoing manual work into a automated one. The leave taken by the employee can be updated automatically in their profile. The software is capable of managing leave, approval of leave, cancellation of leave and also can notify the approval or cancellation of leave though mail. A simple diagram that shows the major components of the all system and external interfaces can be helpful.

4.1.2 Product Features

The system will have the capability of managing the leaves of every employees. Head of Department (HOD) will have permissions to check the data of every faculties of their department. HOD can approve leave through an application and can view leave information of every employee. Our System is one of a kind. The admin of our system will be overlooking the information of every users.

4.1.3 User Classes and Characteristics

Primary users of the system will be employees working in college as a staff member, HOD, admin. Very little technical expertise is required for reading the outputted data since it is in personal leave report.

4.1.4 Operating Environment

Our System will provide web based application because it is very convenient for all every to use from anywhere. Now a day everything came with internet simplicity to access information from anytime anywhere. This application will also reduce the paper work.

4.1.5 Design and Implementation Constraints

This application have high performance and it is also user-friendly. The application is security based system and validation of users. The response time of this application is very fast. Secondly being a web application internet facility must be 24x7.

4.2 System Features

1. Configuration Fields (Leave Type, Holiday List, Department Schedule)
2. Automatically Update Leave Balance
3. Leave Approval Workflow

4.2.1 Configuration Fields (Leave Type, Holiday List, Department Schedule)

Description and Priority

Employees can view their balance leave and their days-off while applying for leave. Head of department must have access to employee leave balance, holiday lists, department schedule, and workforce coverage to evaluate leave requests better.

4.2.2 Automatically Update Leave Balance

Description and Priority

Leaves taken by an employees will be automatically updated to their profile so that when next time they apply for leave they can first check that which type of leave is still available for them.

4.2.3 Leave Approval Workflow

Description and Priority

We have created a set up where employees can apply for leave and then the leave application will be submitted. HOD will give the approval of employees then the approval notification will be automatically sent to employees through email-id which they have updated to their profile. This is workflow of leave approval.

4.3 External Interface Requirements

4.3.1 User Interfaces

a. All employees should register first to get all services.

b. All the data asked in registration form should be accurate.

c. User Interface has one interface : Website

   i. Home Page : Here we show project quick start.

   ii. Login : User's login form.

4.3.2 Hardware Interfaces

a. Intel Core i5 3rd gen processor or any equivalent.

b. 1 GB RAM or more and 40GB hard disk recommended for primary partition.

4.3.3 Software Interfaces

a. Microsoft Windows 7 or later/Ubuntu 12.0 LTS or later

b. XAMPP

c. Web Browsers : Internet Explorer, Mozilla Firefox, Google Chrome etc.

4.3.4 Communications Interfaces

The system consist of three main block each of them is mandatory

a. Dataset: The dataset is intended for sorting different type of leaves.

b. PhpMyAdmin Server: This server is intended for data management it receive the commands through API of system.

c. API: This is the core our system. By means of this function API connects the database server (MYSQL SERVER) and generate request for data issue.

4.4 Nonfunctional Requirements

4.4.1 Performance Requirements

a. Execution of model requires couple of minutes the webpage should not be interrupted during that duration.

b. Load on the Server might hamper the required time.

4.4.2 Safety Requirements

a. Password verification is provided while changing the password onto the system.

b. The password entered can be helpful in logging in . Hence only genuine people can get access to system.

4.4.3 Security Requirements

Admin and Staff members will be able to log in to the leave management system. Staff members will have access to the leave management and scheduling subsystems. Admin will have access to the management subsystem as well as the leave management and scheduling subsystems. Access to the various subsystem will be protected by a user log in screen that requires a valid UserId.

Chapter 5

System Design

5.1 System Requirements Definition

Now we have to design our system before implementing it in such a way that it can execute all the work we want without any loss of data and without using any kind of functionality.The objective of the requirements definition phase is to derive the two types of requirement:

5.1.1 Functional requirements

a. The user needed to be able to register in the portal with his own set of attributes as required in the entity attributes.

b. The user can login with his credentials. User should be able to enter the detail of the leave.

c. An employee can apply for the leave by entering in that and picking the date from date pickers and giving the other important attributes in that.

d. Now he can confirm the leave request then it goes to the admin panel.

e. Here admin have the option shown to him as see the request and other approved requests.

Use-case Diagram

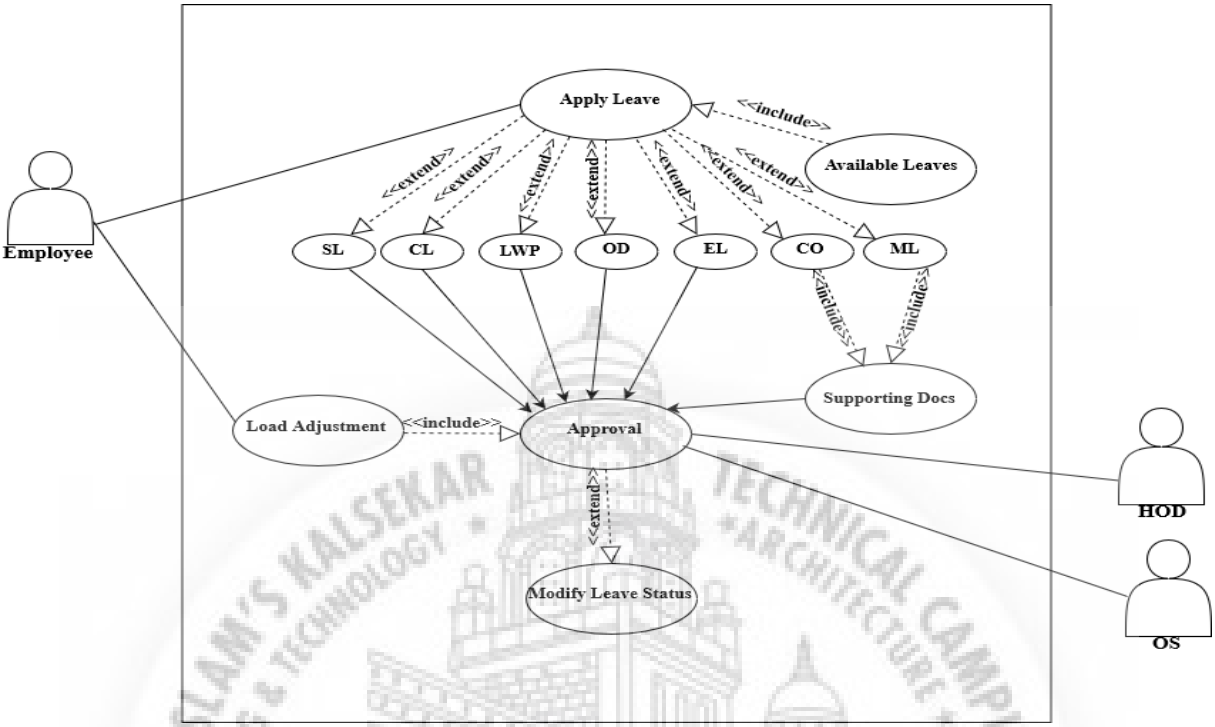

Figure 5.1: Use-case

In our system there will be an employee who can apply for leave and adjust their load then he/she have to submit for approval. HOD / Director will approve the leave of an employee. For applying leave an employee have to select the types of leave. The types of leaves are SL, CL, LWP, OD, EL, CO, ML, Available leave. For CO and ML, the supporting document need to be attached. When the approval of leave is given then the modification of leave will be done by OS.

Data-flow Diagram

Data flow diagram explains how data is transferred through system. Data from which module flowing where can be recognized by this diagram. Data flow diagram helps to identify inputs, outputs for modules.

- DFD Level 0 : It contains total no of 3 process in our DFD level 0 diagram. It has Employee, LMS and Higher Authority.

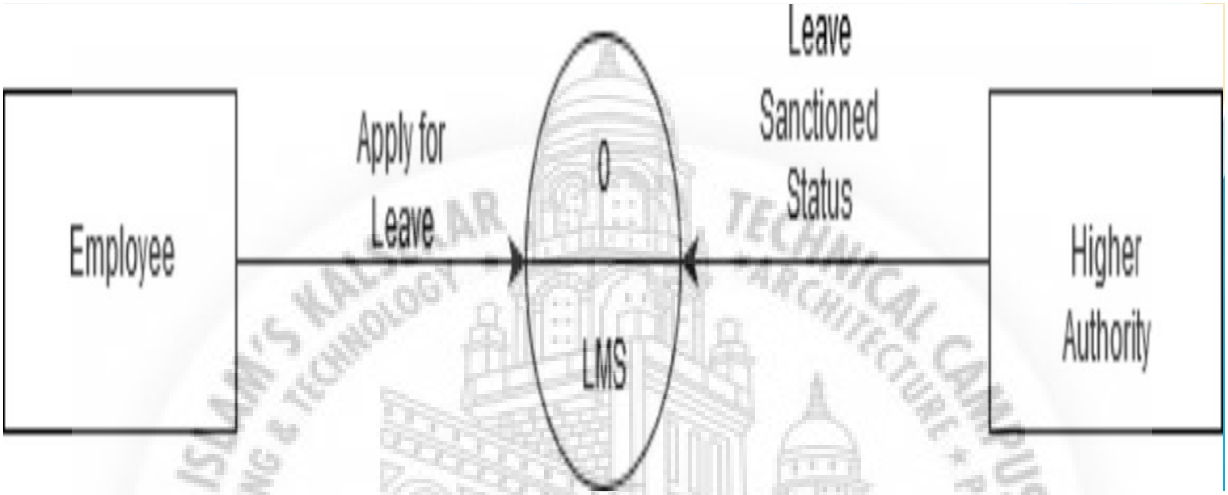

Figure 5.2: DFD Level 0

- DFD level 1 : In this level the flow of data from various entities of the system.

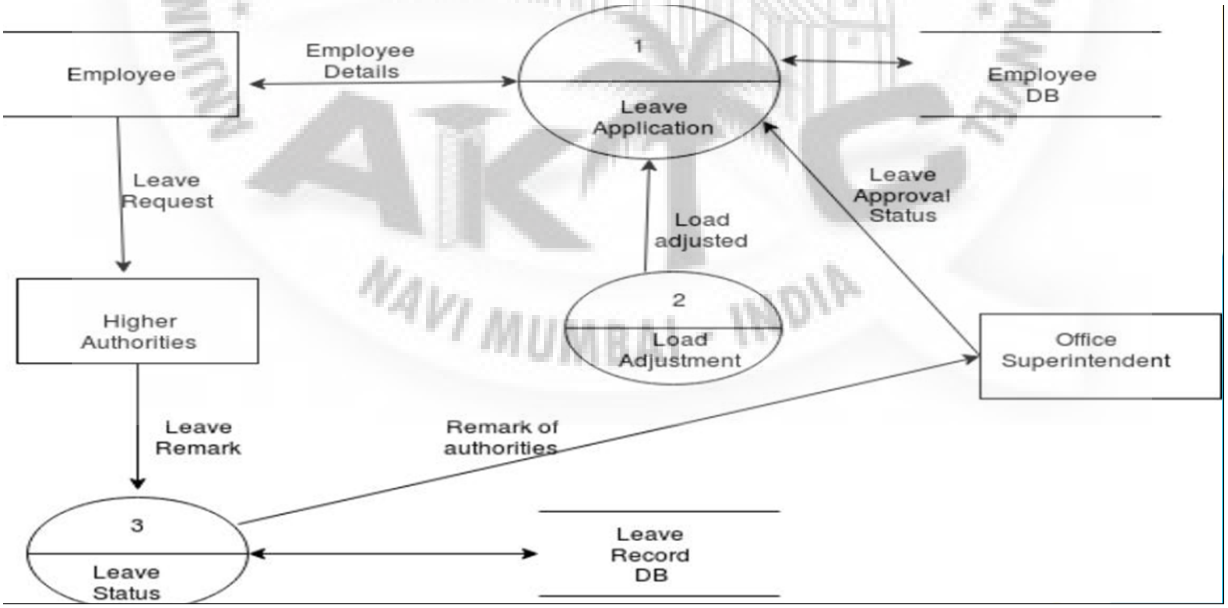

Figure 5.3: DFD Level 1

- DFD level 2 : In this level the flow data where an employee can apply for leave and leave will be sanction by higher authority.

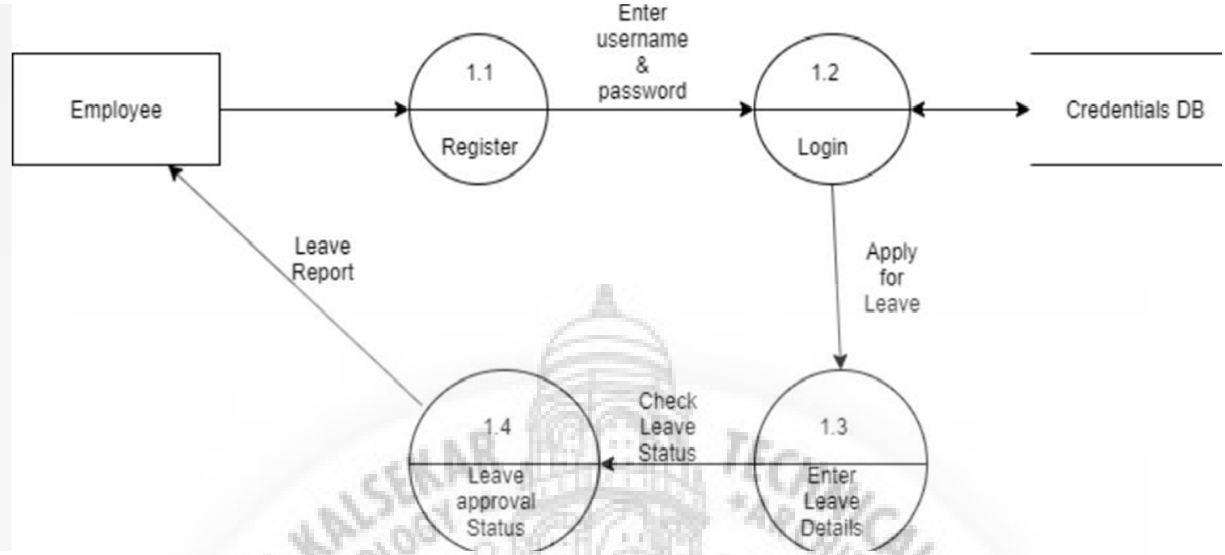

Figure 5.4: DFD Level 2

5.1.2 System requirements (non-functional requirements)

Non-functional of leave application management system necessities place restrictions on the merchandise being developed, the event method, and specify external constraints that the merchandise should meet.

5.2 System Architecture Design

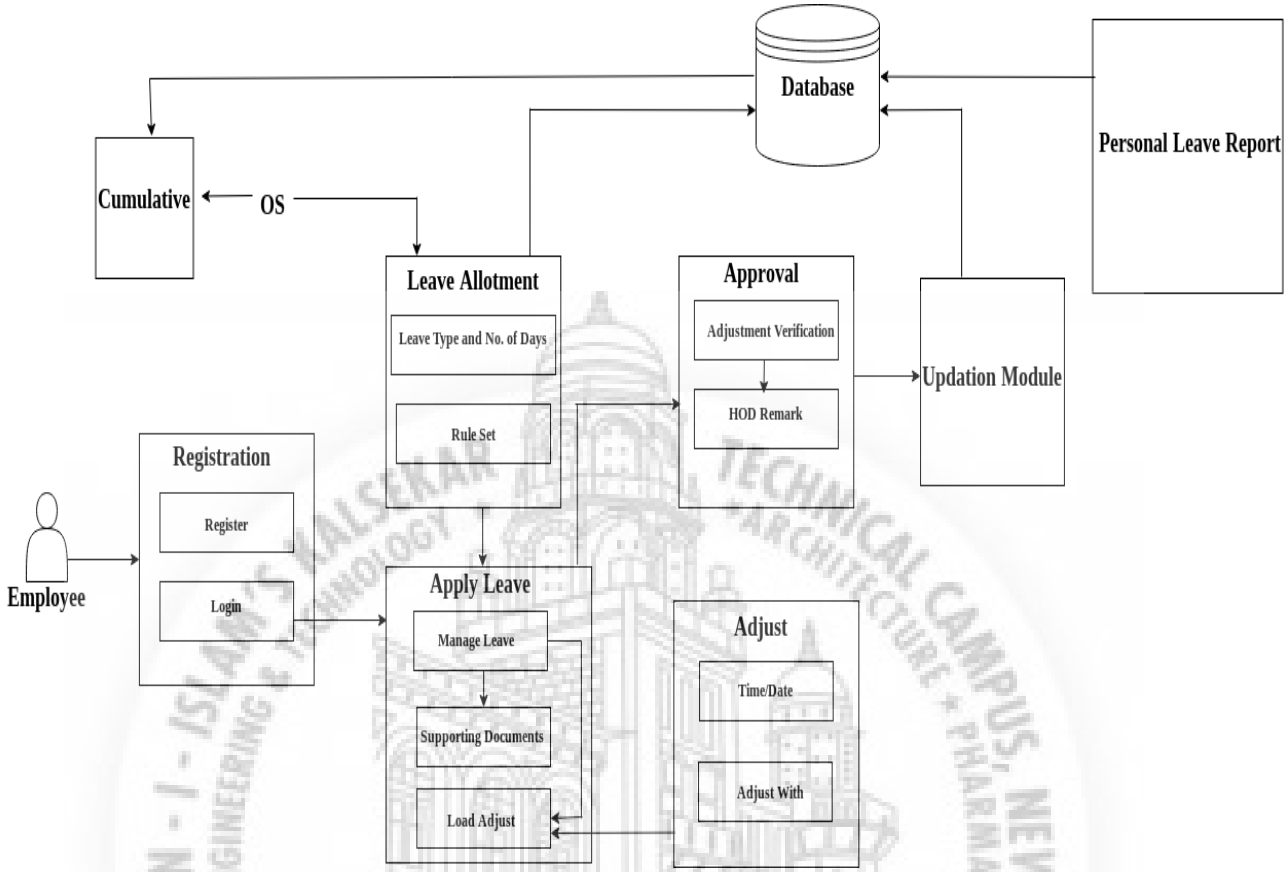

Figure 5.5: System Architecture

5.3 Systems Integration

A Leave Management System(LMS) automates the leave request process, making it hassle-free for both the management and the employees. The solution of your choice should be robust enough to seamlessly handle all the stages involved in a leave management process: application, approval/rejection, filing leaves, managing leave balance, and analysis.

5.3.1 Class Diagram

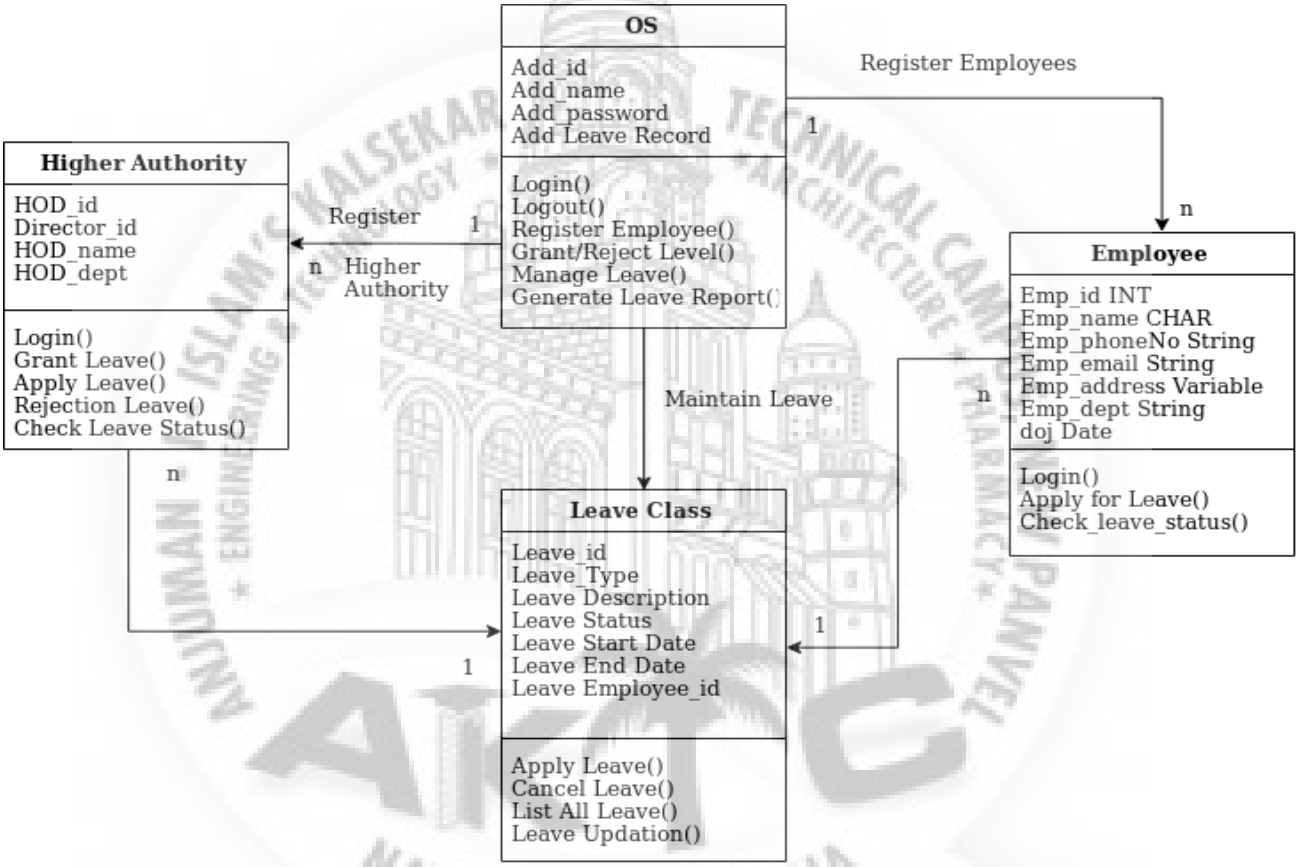

Figure 5.6: Class Diagram

In class diagram of our system there are different panels such as higher authority, office superintendent, employee. They have their leave register carried by leave class panel for records of all employees and their request where sanctioned or rejected by their particular department HOD/Director.

5.3.2 Sequence Diagram

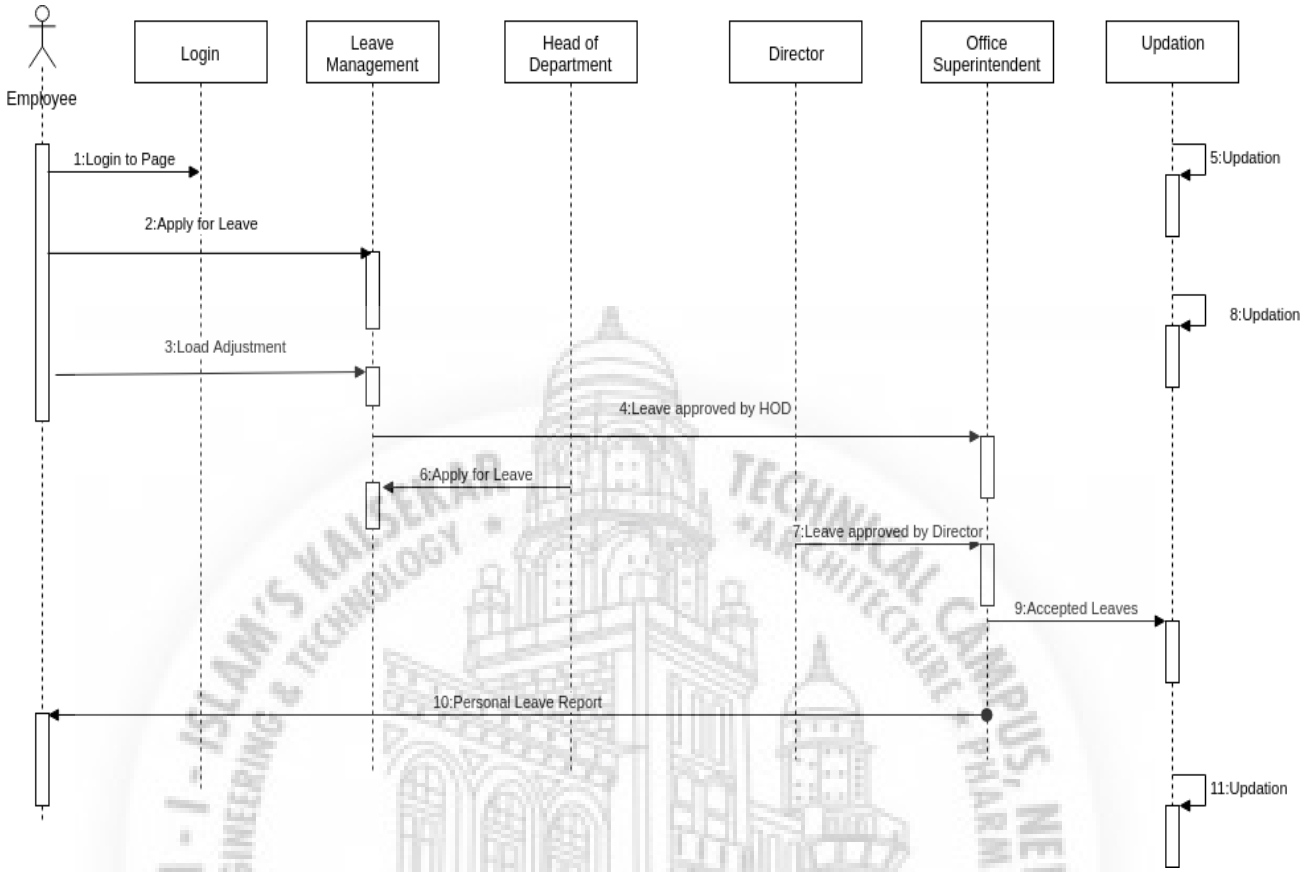

Figure 5.7: Sequence Diagram

The sequence diagram consist of login page, leave management, head of department, director,office superintendent, updation. The employee can login to their account and they can apply for leave by the procedure of leave management. If faculty is applying for leave then they to adjust their load through load adjustment in leave management system. HOD will approve the leave application of faculty. If HOD will apply for leave then the leave approval will be done by Director. Director can also apply for leave. The acception or rejection of leave will be updated and the personal report will generate

5.3.3 Activity Diagram

1. **Employee**

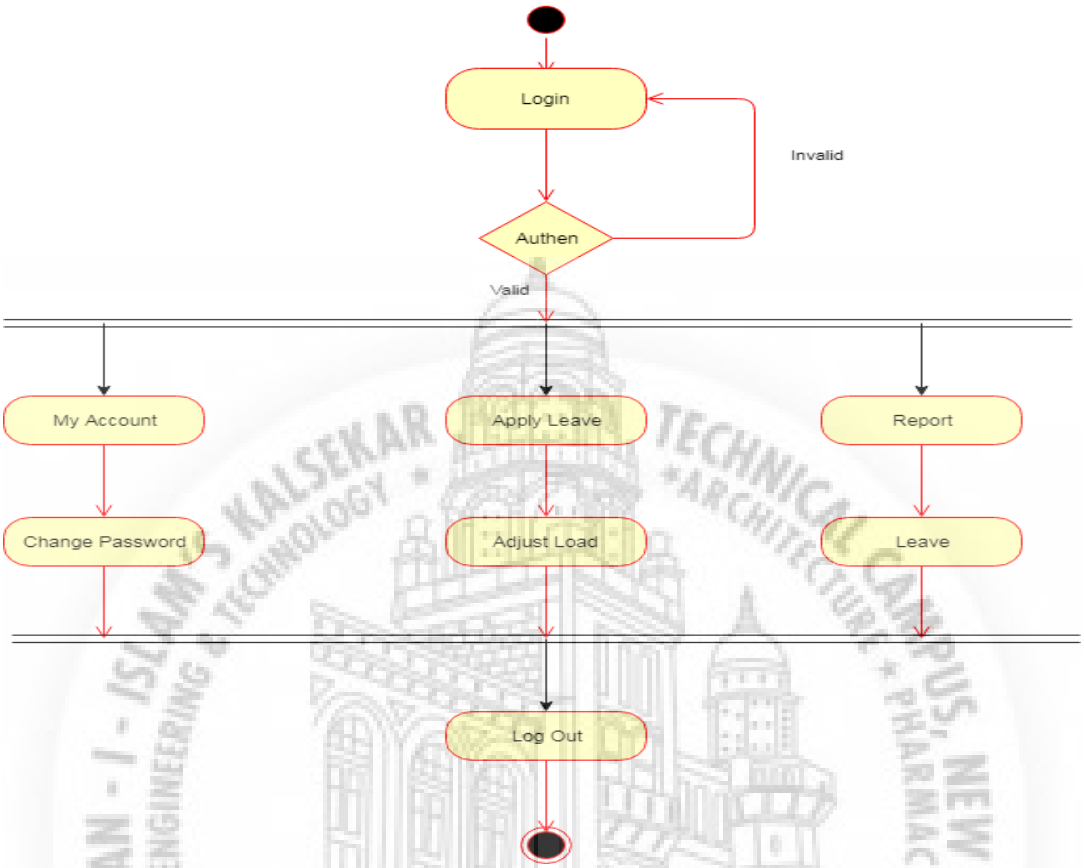

Figure 5.8: Activity Diagram for Employee

In our system there will be an employee who will login to their account and if they want they can change their password. Employee can apply for leave and if they are applying for leave they have to adjust their load to some other employee. After that they have to submit their leave report for sanction.

2. Office Superintendent

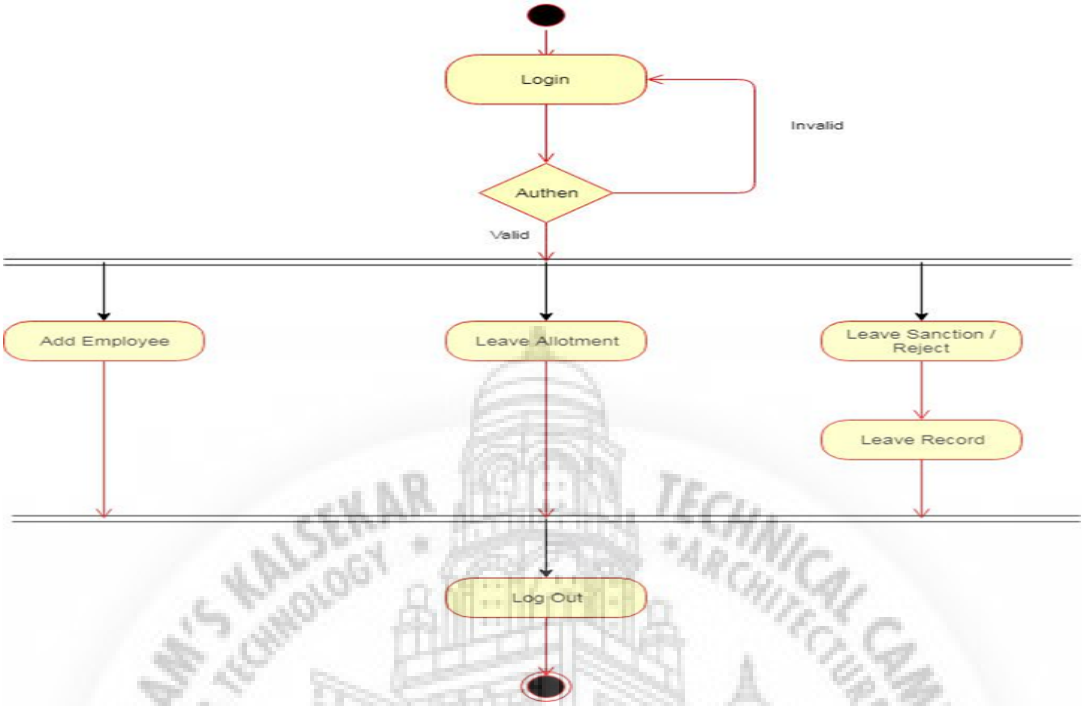

Figure 5.9: Activity Diagram for Office Superintendent

In our system there will be an office superintendent who will login to their account. Office Superintendent can add employee. They can also provide the leave allotment i.e. types of leave. If any leave has been sanctioned or rejected then they will generate a leave record of the employee.

3. Higher Authority

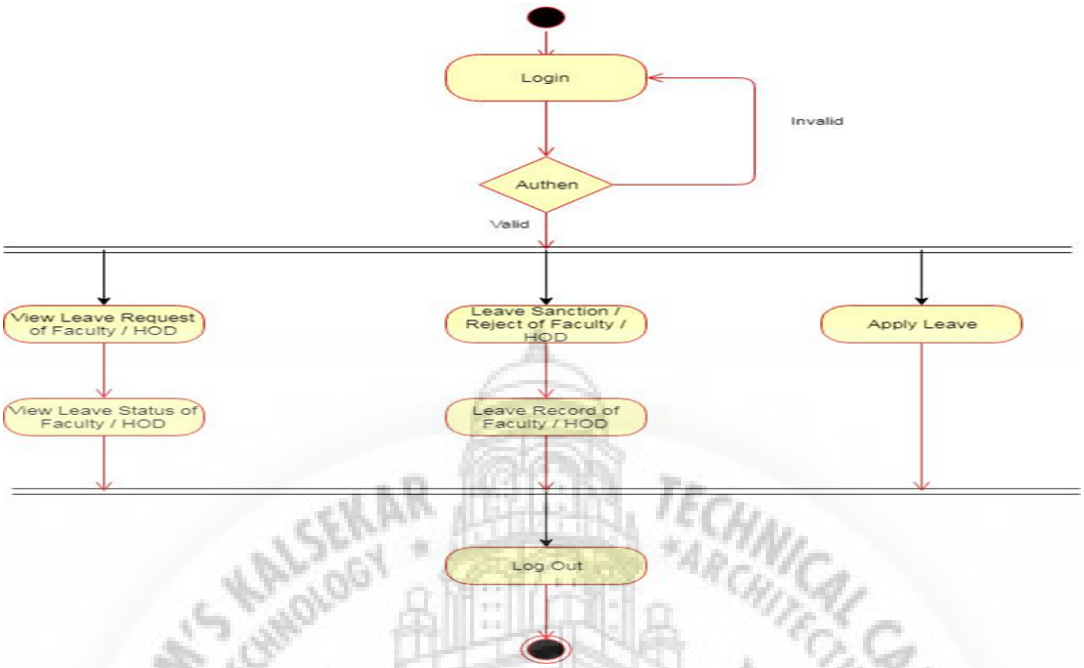

Figure 5.10: Activity Diagram for Higher Authority

In our system there will be an higher authority who will login to their account. Higher authority will first check the leave request of employee and then they will check the leave status of employee, so that higher authority can sanction or reject the leave request. After that leave record will be generated. Higher Authority can also apply for leave.

Chapter 6

Implementation

6.1 Registration

The admin will first register on the behalf of every employee and gives an appropriate login id and password to every employee. After login with that given id and password by admin, employee will get an pop up notification to change the password.

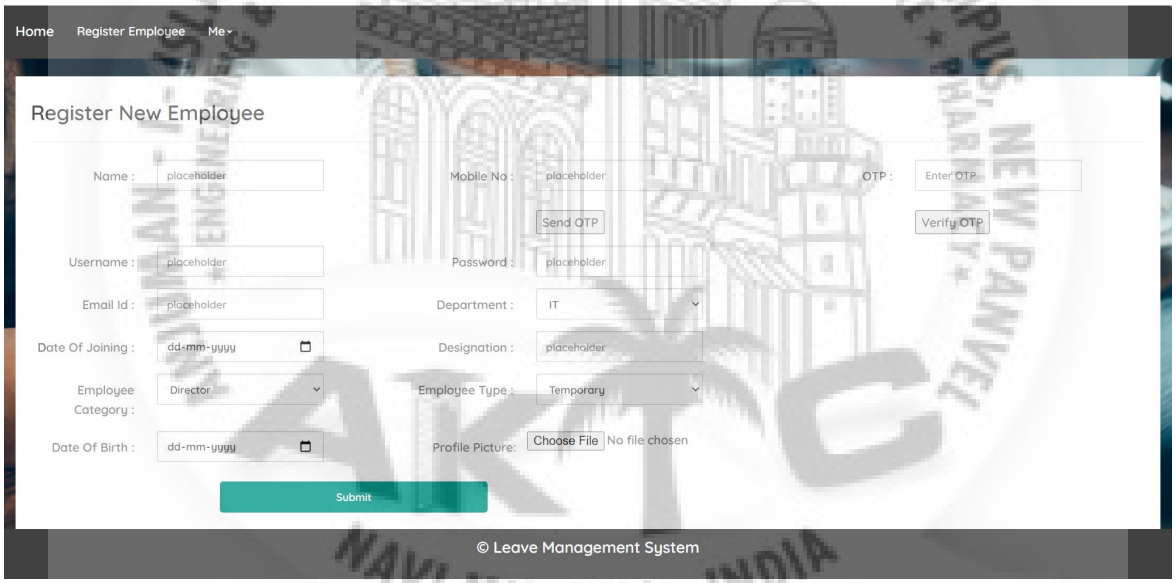

Figure 6.1: Registration Page

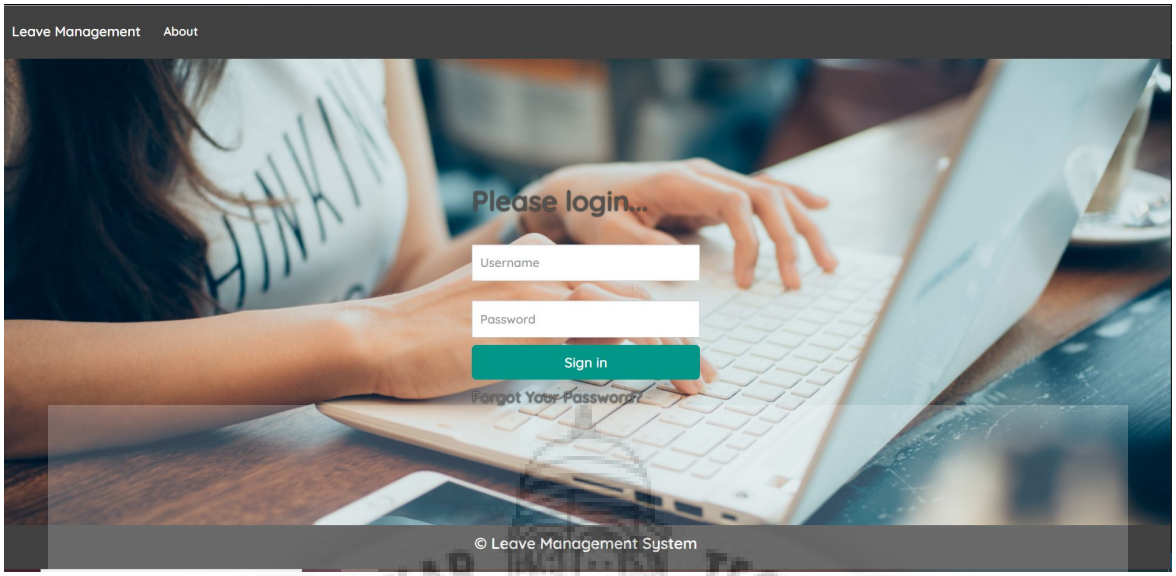

Figure 6.2: Login Page

```
<?php
session_start();
include 'adminnavi3.php';
if(isset($_SESSION['adminuser']))
    {
      if(isset($_GET['err']))
      {
        //echo "<div class = 'error'><b><u>".htmlspecialchars($_GET['err']."</u
            ></b></div><br/>";
        $message1 = htmlspecialchars($_GET['err']);
        echo "<script type='text/javascript'>alert('$message1');</script>";
        header( "refresh:1;url=register.php" );
      }
    }
else
  {
    header('location:../signin.php?err='.urlencode('Please Login first to access
        this page'));
  }

?>

<html>
<head>
<title >::Leave Management::</title>
<style>
body {
  overflow-y: scroll; /* Add the ability to scroll */
}

/* Hide scrollbar for Chrome, Safari and Opera */
body::-webkit-scrollbar {
    display: none;
}

/* Hide scrollbar for IE and Edge */
body {
    -ms-overflow-style: none;
}
</style>
```

```
<script type="text/javascript">
function disableField(val) {
    console.log(val);
    var selecttype = document.getElementById("selecttype");
    var desiginput = document.getElementById("desiginput");
    var dojinput = document.getElementById("dojinput");
    var selectdept = document.getElementById("selectdept");
  if( val == "Director" || val == "HOD"  ) {
    selecttype.disabled = true;
    desiginput.disabled = true;
  }else{
    selecttype.disabled = false;
    desiginput.disabled = false;
  }
  if(val =="Director"){
    dojinput.disabled = true;
    selectdept.disabled = true;
  }
  else{
    dojinput.disabled = false;
    selectdept.disabled = false;
  }

}
</script>
</head>
<body style='padding-bottom:80px;'>
<div class='container-fluid'>
<div class="card rounded-0 col align-self-center" style="padding-left:20px;
    padding-right:20px;padding-top:10px;padding-bottom:10px; background-color:
    white; ">
<div class="card-header">
    <h3 class="mb-0">Register New Employee</h3>
</div>
<hr/>
<div class="card-body">
  <!-- <div class="error"></div> -->
  <!-- <?php
    if(isset($_POST['sendotp'])){


    // require('textlocal.class.php');
    // require('credentials.php');

    // $textlocal = new Textlocal(false,false, API_KEY);

    // $numbers = $_POST['mobinput'];
    // $sender = 'TXTLCL';
    // $otp= mt_rand(10000,99999);
    // $message = 'Your Otp is '.$otp;

    // try {
    //     $result = $textlocal->sendSms($numbers, $message, $sender);
    //     print_r($result);
    //     setcookie('otp',$otp);
    //     echo "OTP successfully send.";
    // } catch (Exception $e) {
    //     die('Error: ' . $e->getMessage());
    // }


```

```
98      // Account details
99    $apiKey = urlencode('8MStLia+r0-3DV3lBUrYAVyXwKaEcEJMETYLJwdY8');
100      $otp= mt_rand(10000,99999);
101
102   // Message details
103   // $numbers = array(918123456789, 918987654321);
104   $sender = urlencode('TXTLCL');
105   $message = rawurlencode($otp);
106
107   $numbers =$_POST['mobinput'];
108
109   // Prepare data for POST request
110   $data = array('apikey' => $apiKey, 'numbers' => $numbers, "sender" => $sender,
          "message" => $message);
111
112   // Send the POST request with cURL
113   $ch = curl_init('https://api.textlocal.in/send/');
114   curl_setopt($ch, CURLOPT_POST, true);
115   curl_setopt($ch, CURLOPT_POSTFIELDS, $data);
116   curl_setopt($ch, CURLOPT_RETURNTRANSFER, true);
117   $response = curl_exec($ch);
118   curl_close($ch);
119
120   // Process your response here
121   echo $response;
122   }
123   if(isset($_POST['verifyotp'])){
124     $otp=$_POST['otp'];
125     if($_COOKIE['otp'] == $otp){
126       echo "Congratulation, Your mobile is verified";
127     } else {
128       echo "Please enter correct otp.";
129     }
130   }
131 ?> -->
132
133 <form class="form-horizontal" action='save.php' method = 'post' enctype="
      multipart/form-data">
134 <fieldset>
135
136
137 <!-- Text input-->
138 <div class='row '>
139 <div class="col-md-4">
140 <div class="form-group">
141   <label class="col-md-4 control-label" for="nameinput">Name :</label>
142   <div class="col-md-6">
143   <input id="nameinput" name="nameinput" type="text" placeholder="placeholder"
        class="form-control input-md" required>
144   </div>
145 </div>
146 </div>
147
148 <div class="col-md-4">
149 <div class="form-group">
150   <label class="col-md-4 control-label" for="mobinput">Mobile No :</label>
151   <div class="col-md-6">
152   <input id="mobinput" name="mobinput" type="tel" placeholder="placeholder"
        class="form-control input-md" pattern="[0-9]{10}" maxlength="12" required
        ><br>
153   <input type="button" class="btnSubmit" value="Send OTP" id="sendotp">
```

```
154     </div>
155   </div>
156   </div>
157   <div class="col-md-4">
158   <div class="form-group">
159     <label class="col-md-4 control-label">OTP :</label>
160     <div class="col-md-6">
161     <input id="otp" name="otp" type="text" placeholder="Enter OTP" class="form-
          control input-md" maxlength="5" required><br>
162     <input type="button" class="btnSubmit" value="Verify OTP" id="verifyotp">
163     </div>
164   </div>
165   </div>
166   </div>
167
168   <!-- Text input-->
169   <div class='row'>
170   <div class="col-md-4">
171   <div class="form-group">
172     <label class="col-md-4 control-label" for="usrnminput">Username :</label>
173     <div class="col-md-6">
174     <input id="usrnminput" name="usrnminput" type="text" placeholder="placeholder"
          class="form-control input-md" required>
175     </div>
176   </div>
177   </div>
178
179   <!-- Text input-->
180   <div class="col-md-4">
181   <div class="form-group">
182     <label class="col-md-4 control-label" for="passinput">Password :</label>
183     <div class="col-md-6">
184     <input id="passinput" pattern="(?=^.{8,}$)((?=.*\d)|(?=.*\W+))(?![.\n])(?=.*[A
          -Z])(?=.*[a-z]).*$" title="UpperCase, LowerCase, Number/SpecialChar and
          min 8 Chars" name="passinput" type="password" placeholder="placeholder"
          class="form-control input-md" required>
185     </div>
186   </div>
187   </div>
188   </div>
189
190   <!-- Text input-->
191   <div class='row'>
192   <div class="col-md-4">
193   <div class="form-group">
194     <label class="col-md-4 control-label" for="emailinput">Email Id :</label>
195     <div class="col-md-6">
196     <input id="emailinput" name="emailinput" type="email" placeholder="placeholder
          " class="form-control input-md" required>
197     </div>
198   </div>
199   </div>
200
201   <!-- Select Basic -->
202   <div class="col-md-4">
203   <div class="form-group">
204     <label class="col-md-4 control-label" for="selectdept">Department :</label>
205     <div class="col-md-6">
206       <select id="selectdept" name="selectdept" class="form-control" required>
207         <option value="IT">IT</option>
208         <option value="CS">CS</option>
```

```
209         <option value="EXTC">EXTC</option>
210       </select>
211     </div>
212 </div>
213 </div>
214 </div>
215 <!-- Text input-->
216 <div class='row'>
217 <div class="col-md-4">
218 <div class="form-group">
219   <label class="col-md-4 control-label" for="dojinput">Date Of Joining :</label>
220   <div class="col-md-6">
221   <input id="dojinput" name="dojinput" type="date" placeholder="placeholder"
        class="form-control input-md" required>
222   </div>
223 </div>
224 </div>
225
226 <!-- Text input-->
227 <div class="col-md-4">
228 <div class="form-group">
229   <label class="col-md-4 control-label" for="desiginput">Designation :</label>
230   <div class="col-md-6">
231   <input id="desiginput" name="desiginput" type="text" placeholder="placeholder"
        class="form-control input-md" required>
232   </div>
233 </div>
234 </div>
235 </div>
236
237 <!-- Select Basic -->
238 <div class='row'>
239 <div class="col-md-4">
240 <div class="form-group">
241   <label class="col-md-4 control-label" for="selectempis">Employee Category :</
        label>
242   <div class="col-md-6">
243     <select id="selectempis" name="selectempis" class="form-control" onclick="
          disableField(this.value)" required>
244       <option value="Director">Director</option>
245       <option value="HOD">HOD</option>
246       <option value="Teaching">Teaching</option>
247       <option value="Non-Teaching">Non-Teaching</option>
248     </select>
249   </div>
250 </div>
251 </div>
252
253 <!-- Select Basic -->
254 <div class="col-md-4">
255 <div class="form-group">
256   <label class="col-md-4 control-label" for="selecttype">Employee Type :</label>
257   <div class="col-md-6">
258     <select id="selecttype" name="selecttype" class="form-control" required>
259       <option value="Temporary">Temporary</option>
260       <option value="Permanent">Permanent</option>
261     </select>
262   </div>
263 </div>
264 </div>
265 </div>
```

```
266
267 <!-- Text input-->
268 <div class='row'>
269 <div class="col-md-4">
270 <div class="form-group">
271   <label class="col-md-4 control-label" for="dobinput">Date Of Birth :</label>
272   <div class="col-md-6">
273     <input id="dobinput" name="dobinput" type="date" placeholder="placeholder"
          class="form-control input-md" required>
274   </div>
275 </div>
276 </div>
277 <!--Profile Picture-->
278 <div class='row'>
279 <div class="col-md-4">
280 <div class="form-group">
281   <label class="col-md-4 control-label" for="profilepicture">Profile Picture:</
        label>
282   <input type="file" name="image" id="image" > <br>
283
284 </div>
285 </div>
286
287
288 </div>
289 <!-- Button -->
290 <div class="col-lg-2"></div>
291 <div class='row'>
292 <div class="col-xs-6">
293 <div class="form-group">
294   <div class="col-md-6">
295     <button id="singlebutton" name="submit" class="btn btn-primary btn-block">
          Submit</button>
296   </div>
297 </div>
298 </div>
299 </div>
300
301 </fieldset>
302 </form>
303 </div>
304 </div>
305 </div>
306 </body>
307 <script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.5.1/jquery.min.js"
    integrity="sha512-bLT0Qm9VnAYZDflyKcBaQ2gg0hSYNQrJ8RilYldYQ1FxQYoCLtUjuuRuZo
    +fjqhx/qtq/1itJ0C2ejDxltZVFg==" crossorigin="anonymous"></script>
308 <script src="verification.js"></script>
309 <script>
310   $(document).ready(function(){
311     $('#sendotp').click(function(){
312       console.log();
313       var mobile=$("#mobinput").val();
314       console.log(mobile);
315       $.ajax({
316                 url: "sendotp.php",
317                 type: "POST",
318                 data:{ mobile: mobile},
319
320                 success: function(result){
321                    console.log(result);
```

```
                    if(result=='sent'){
                      alert("OTP Successfully sent to your mobile number");
                    }

                }
            });

    })

    // verify otp
    $('#verifyotp').click(function(){
      console.log();
      var otp=$("#otp").val();
      // console.log(mobile);
      $.ajax({
                url: "verifyotp.php",
                type: "POST",
                data:{ otp: otp},

                success: function(result){
                    console.log(result);
                    if(result=='Congratulation'){
                      alert("OTP Verified Successfully ");
                    }

                }
            });

    })
  })
</script>

</html>
```

6.2 Apply Leave

The employee can select types of leave and number of days for taking leave. The types of leaves are casual leave, earn leave, medical leave, special leave, vacation, leave without pay, compensatory leave, outdoor duty. The employee wants to apply for leave so he/she will fill the form in the "apply leave form" by inserting the details. The employee have to manage their leave with time duration and also by selecting types of leaves.

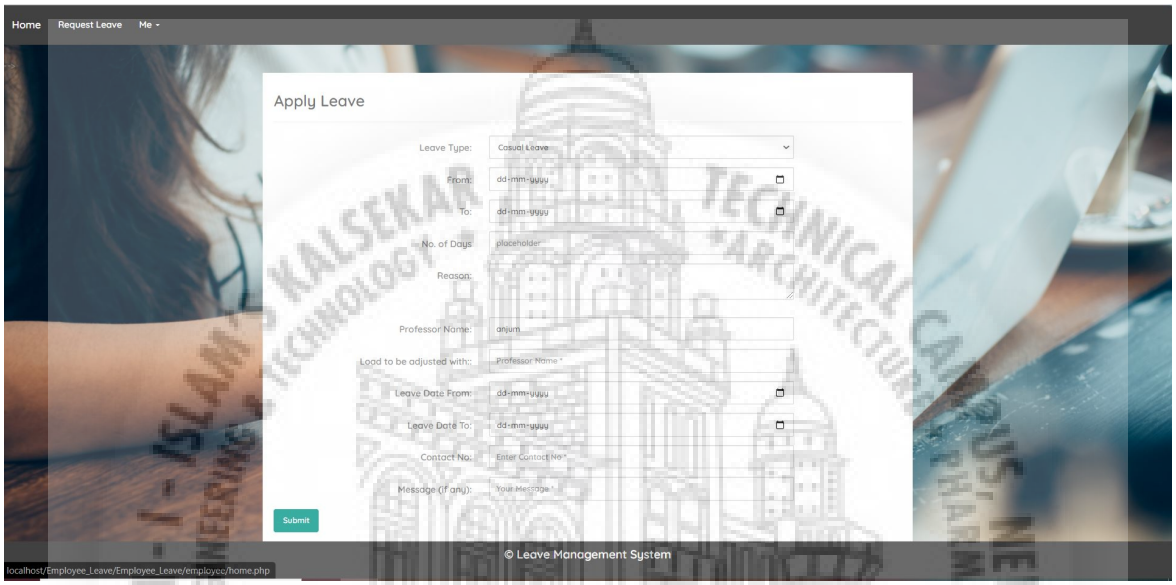

Figure 6.3: Apply Leave Page

```
  <html>
<head>
<title >::Leave Management::</title>
<!------ Include the above in your HEAD tag ---------->
</head>
<body style="align-items:center;">

<!-- <?php
session_start();
if(isset($_SESSION['empuser']))
{
  include 'clientnavi3.php';
  include 'connect.php';
  $user = $_SESSION['empuser'];
  $sql="SELECT * FROM employees WHERE  UserName = '".$user."'";
  $result = $conn->query($sql);
      if ($result->num_rows > 0) {
              while($row = $result->fetch_assoc()) {
                  $Name=$row["EmpName"];
                  $Dept=$row["Dept"];
                  }
                }
// if(isset($_POST['submit']))
// { // Fetching variables of the form which travels in URL
// $Ltype = $_POST['type'];
// $Lfrom = $_POST['from'];
```

```
// $Lto = $_POST['to'];
// $Ldays = $_POST['days'];
// $Lreason = $_POST['reason'];
// $Adjustment= $_POST['adjustment'];
// //if($name !=''||$email !=''){
// //Insert Query of SQL

// $sql = "INSERT INTO emp_leaves(EmpName, LeaveType, LeaveDays, Reason,
    StartDate, EndDate, Dept, Adjustment) values ('$Name', '$Ltype', '$Ldays','
    $Lreason','$Lfrom','$Lto','$Dept', '$Adjustment')";
// if ($conn->query($sql) === TRUE) {
// echo "<script type='text/javascript'>alert('Leave Applied Successfully');</
    script>";
// }
// else{
// echo "<script type='text/javascript'>alert('Error!Please try again.');</
    script>";
// }
// }
}
else
{
    header('location:../signin.php?err='.urlencode('Please Login First For
        Accessing This Page !'));
    exit();
}
//mysql_close($connection); // Closing Connection with Server
?>-->

<div class='container' >
                    <!-- form card login -->
<div class="card rounded-0 col align-self-center" style="padding-left:20px;
    padding-right:20px;padding-top:10px;padding-bottom:10px; background-color:
    white;" >
<div class="card-header">
    <h3 class="mb-0">Apply Leave</h3>
</div>
<hr/>
<div class="card-body">
<form class="form-horizontal" id="regForm">

<!-- Select Multiple -->
<div class="form-group ">
  <label class="col-md-4 control-label" for="selectmultiple">Leave Type:</label>
  <div class="col-md-6">
  <select class="form-control" name="type" required>
              <option>Casual Leave</option>
              <option>Earned Leave</option>
              <option>Sick Leave</option>
              <option>Special Leave</option>
              <option>Outdoor Leave</option>
              <option>Leave Without Pay</option>
              <option>Compensatory Leave</option>
            </select>
  </div>
</div>

<!-- Text input-->
<div class="form-group">
  <label class="col-md-4 control-label" for="textinput">From:</label>
  <div class="col-md-6">
```

```
81    <input id="pick_date" name="from" type="date" placeholder="placeholder" class=
          "form-control input-md" required onchange="cal()">
82    </div>
83  </div>
84
85  <!-- Text input-->
86  <div class="form-group">
87    <label class="col-md-4 control-label" for="textinput">To:</label>
88    <div class="col-md-6">
89    <input id="drop_date" name="to" type="date" placeholder="placeholder" class="
          form-control input-md" required onchange="cal()">
90    </div>
91  </div>
92
93  <!-- Text input-->
94  <div class="form-group">
95    <label class="col-md-4 control-label" for="textinput">No. of Days</label>
96    <div class="col-md-6">
97    <input id="numdays2" name="days" type="text" placeholder="placeholder" class="
          form-control input-md" required>
98    </div>
99  </div>
100
101 <!-- Textarea -->
102 <div class="form-group">
103   <label class="col-md-4 control-label" for="textarea">Reason:</label>
104   <div class="col-md-6">
105     <textarea class="form-control" id="textarea" name="reason" required></
          textarea>
106   </div>
107 </div>
108
109 <!-- Text input-->
110 <!-- <div class="form-group">
111   <label class="col-md-4 control-label" for="textinput">Load to be Adjusted with
          </label>
112   <div class="col-md-6">
113   <input id="textinput" name="adjustment" type="text" placeholder="placeholder"
          class="form-control input-md" required>
114   </div>
115 </div> -->
116
117 <!-- Button (Double) -->
118 <div class="form-group">
119   <div class="col-sm-8">
120   <button onclick=showLoadAdjustment() type="button" id="loadButton">Load
          Adjustment</button>
121
122     <!--button id="button2id" name="button2id" class="btn btn-danger ">Cancel</
          button-->
123   </div>
124 </div>
125
126 <div id = "loadAdjustmentWrapper" style="display:none;">
127 <div class="form-group">
128   <label class="col-md-4 control-label" for="textinput">Professor Name:</label>
129   <div class="col-md-6">
130   <input type="text" class="form-control" id="grad3" name="name" required value=
          "<?php echo $Name;?>">
131   </div>
132 </div>
```

```
133
134 <!-- Text input-->
135 <div class="form-group">
136   <label class="col-md-4 control-label" for="textinput">Load to be adjusted with
        ::</label>
137   <div class="col-md-6">
138   <input type="text" class="form-control" id="grad3" name="adjustment" required
        placeholder="Professor Name *" >
139   </div>
140 </div>
141
142 <!-- Text input-->
143 <div class="form-group">
144   <label class="col-md-4 control-label" for="textinput">Leave Date From:</label>
145   <div class="col-md-6">
146   <input type="date" class="form-control" id="grad3" name="date" required
        placeholder="Enter Leave Date From *">
147   </div>
148 </div>
149
150 <!-- Text input-->
151 <div class="form-group">
152   <label class="col-md-4 control-label" for="textinput">Leave Date To:</label>
153   <div class="col-md-6">
154   <input id="textinput" name="ldto" type="date" placeholder="Leave Date To"
        class="form-control input-md" required>
155   </div>
156 </div>
157
158 <!-- Textarea -->
159 <div class="form-group">
160   <label class="col-md-4 control-label" for="textarea">Contact No:</label>
161   <div class="col-md-6">
162   <input type="tel" class="form-control" id="grad3" name="contact" required
        placeholder="Enter Contact No *" >
163   </div>
164 </div>
165
166 <!-- Text input-->
167 <!-- <div class="form-group">
168   <label class="col-md-4 control-label" for="textinput">Load to be Adjusted with
        </label>
169   <div class="col-md-6">
170   <input id="textinput" name="adjustment" type="text" placeholder="placeholder"
        class="form-control input-md" required>
171   </div>
172 </div> -->
173
174 <!-- Textarea -->
175 <div class="form-group">
176   <label class="col-md-4 control-label" for="textarea">Message (if any):</label>
177   <div class="col-md-6">
178   <input type="text" class="form-control" id="grad3" name="message" required
        placeholder="Your Message *" >
179   </div>
180 </div>
181
182 <!-- Button (Double) -->
183 <div class="form-group">
184   <div class="col-sm-8">
185   <!-- <a href="load.php">Submit</a> -->
```

```
186
187     <button type="submit" id="button2id" name="loadSubmit" class="btn btn-
            primary ">Submit</button>
188   </div>
189 </div>
190
191
192 </div>
193
194 </form>
195 </div>
196 </div>
197 </body>
198 </html>
199
200
201 <script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.5.1/jquery.min.js"
      integrity="sha512-bLT0Qm9VnAYZDflyKcBaQ2gg0hSYNQrJ8RilYldYQ1FxQYoCLtUjuuRuZo
      +fjqhx/qtq/1itJ0C2ejDxltZVFg==" crossorigin="anonymous"></script>
202 <script>
203   function GetDays(){
204     var dropdt= new Date(document.getElementById("drop_date").value);
205     var pickdt= new Date(document.getElementById("pick_date").value);
206     // reutrn parseInt((dropdt - pickdt) / (24 * 3600 * 1000));
207     return parseInt((dropdt - pickdt) / (24 * 3600 * 1000));
208   }
209   function cal(){
210     if(document.getElementById("drop_date")){
211       document.getElementById("numdays2").value=GetDays();
212     }
213   }
214       function showLoadAdjustment(){
215     document.getElementById('loadAdjustmentWrapper').style.display = "block";
216     document.getElementById('loadButton').style.display = "none";
217   }
218
219     jQuery("#button2id").on("click", function(e){
220         e.preventDefault();
221
222 // $("#regForm").serialize() + "&" +
223 // console.log(document.getElementById('regForm'));
224           $.ajax({
225             url: "submit.php",
226             type: "POST",
227             data: $("#regForm").serialize(),
228
229             success: function(result){
230                 if(result.trim()=='1'){
231                     console.log(result);
232
233                     alert('Leave Applied Successfully');
234                   }
235                 else{
236                     console.log(result);
237                    alert('Error!Please try again.');
238                 }
239             }
240         });
241     });
242     </script>
```

6.3 Approval

The employee will submit the form to HOD. When the leave request will be accepted by any of the faculty then only the leave approval will be given by HOD. But if the leave request is not accepted by any of the faculty then the leave will be rejected. The leave sanction or rejection will be done by HOD. And if HOD is applying for leave then the leave sanction or rejection will be done by Director of college. This remark would be received by the admins who would be responsible for granting the leave.

Figure 6.4: All Leave Requests of Employees in HOD Profile

Figure 6.5: Leave Request of HOD

Figure 6.6: Leave Status of HOD

```
  <?php
session_start();
?>
<title>::Leave Management::</title>
<div class = "textview">
<center>
<?php


include 'connect.php';
include 'clientnavi3.php';
$count = 0;
if(isset($_SESSION['hoduser']))
  {
  $sql = "SELECT Dept, UserName FROM hod WHERE UserName = '".$_SESSION['hoduser'
      ]."'";
  $result = $conn->query($sql);
  if($result->num_rows > 0)
    {
    while($row = $result->fetch_assoc())
      {
      if($_SESSION['hoduser'] == $row['UserName'])
        {

        $sql2 = "SELECT e.id,e.Dept,e.EmpName,el.EmpName,el.LeaveType,el.
            RequestDate,el.LeaveDays,el.StartDate,el.EndDate,el.Id,el.Dept FROM
            employees e, emp_leaves el WHERE e.Dept = el.Dept AND e.Dept = '".
            $row['Dept']."' AND el.Status = 'Requested' AND e.EmpName = el.
            EmpName";
        $result2 = $conn->query($sql2);
        if($result2->num_rows > 0)
          {
            echo "<div class='container'>";
            echo "<table class='table table-bordered' style='background-color: #
                ffffff;'>";
            echo "<tr>";
            echo "<th>Employee Name</th>";
            echo "<th>Leave Type</th>";
            echo "<th>Request Date</th>";
```

```
34              echo "<th>Leave Days</th>";
35              echo "<th>Starting Date</th>";
36              echo "<th>Ending Date</th>";
37              echo "<th>Action</th>";
38              echo "</tr>";
39              while ($row2 = $result2->fetch_assoc())
40                {
41                echo "<tr>";
42                echo "<td>";
43                echo $row2['EmpName'];
44                echo "</td>";
45                echo "<td>";
46                echo $row2['LeaveType'];
47                echo "</td>";
48                echo "<td>";
49                echo $row2['RequestDate'];
50                echo "</td>";
51                echo "<td>";
52                echo $row2['LeaveDays'];
53                echo "</td>";
54                echo "<td>";
55                echo $row2['StartDate'];
56                echo "</td>";
57                echo "<td>";
58                echo $row2['EndDate'];
59                echo "</td>";
60                echo "<td><a href = 'acceptleave.php?id=".$row2['Id']."&empid=".
                      $row2["id"]."'>Accept</a>       
                       <a href = 'rejectleave.php?id=".$row2['Id']."&empid=".$row2["
                      id"]."'>Reject</a></td>";
61                echo "</tr>";
62                $count++;
63                }
64              echo '<h1 style="color:#009688;text-shadow: 0px 0px 2px #000000;">';
65              echo $count;
66              echo ' Leave(s)</h1>';
67            }
68            else{
69              echo '<h1 style="color:#009688;text-shadow: 0px 0px 2px #000000;">';
70              echo '0 Leave(s)</h1>';
71            }
72          echo "</table>";
73          }
74        else
75          {
76          header("location:../signin.php?err=".urlencode('Please login first to
                view this page !'));
77          }
78        }
79      }
80    }
81  else
82    {
83    header('location:../signin.php?err='.urlencode('Please login first to view
          this page !'));
84    }
85  ?>
86  </div>
87  </center>
```

6.4 Updation

The update of faculties profile, leave taken by faculty, number of leaves and also types of leaves taken by all faculty all these are done in updation module .

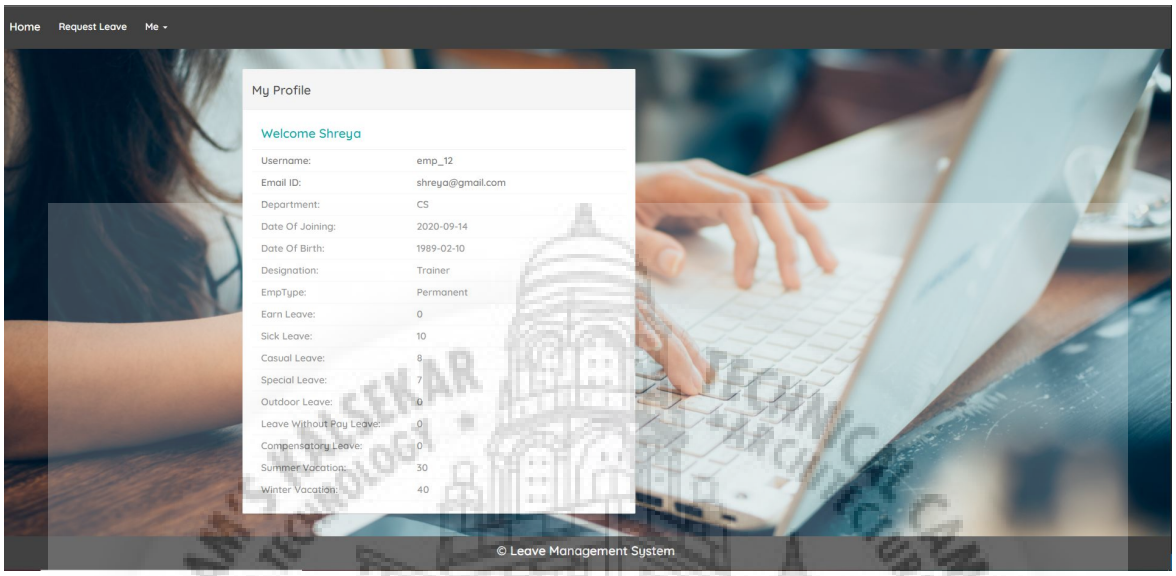

Figure 6.7: Employee's Profile Page

```
  <title>::Leave Management::</title>
<?php
session_start();
if(isset($_SESSION['empuser']))
  {
  include 'connect.php';
  include 'clientnavi3.php';
  $sql = "SELECT id,UserName,EmpName FROM employees WHERE UserName = '".
     $_SESSION['empuser']."'";
  $result = $conn->query($sql);
  if($result->num_rows > 0)
    {
    while($row = $result->fetch_assoc())
      {
      $name = $row["EmpName"];
      $sql2 = "SELECT * FROM emp_leaves WHERE EmpName = '".$name."'";
      $result2 = $conn->query($sql2);
      if($result2->num_rows > 0)
        {
          echo '<h1 style="color:#009688;text-shadow: 0px 0px 2px #000000;text-
              align:center">';
            echo 'All Leaves</h1>';
        echo "<div class='container'>";
        echo "<table class='table table-bordered' style='background-color: #
            ffffff;'>";
        echo "<tr><th>Name</th>";
        echo "<th>Type Of Leave</th>";
        echo "<th>Request Date</th>";
        echo "<th>Days Of Leave</th>";
        echo "<th>Start Date</th>";
        echo "<th>End Date</th>";
        echo "<th>Status</th>";
        while($row2 = $result2->fetch_assoc())
```

```
            {
            echo "<tr><td>".$row2["EmpName"]."</td>";
            echo "<td>".$row2["LeaveType"]."</td>";
            echo "<td>".$row2["RequestDate"]."</td>";
            echo "<td>".$row2["LeaveDays"]."</td>";
            echo "<td>".$row2["StartDate"]."</td>";
            echo "<td>".$row2["EndDate"]."</td>";
            echo "<td>".$row2["Status"]."</td>";
            }
          echo "</table>";
          echo "</center>";
          echo "</div>";
          }
        }
      }
  }
else
  {
  header('location:../signin.php?err='.urlencode('Please Login First To Access
      This Page !'));
  exit();
  }
?>
```

Chapter 7

System Testing

The aim of the system testing process was to determine all defects in our project.The program was subjected to a set of test inputs and various observations were made and based on these observations it will be decided whether the program behaves as expected or not. We have done integration testing as well as unit testing.

a. INTEGRATION TESTING In this type of testing we test various integration of the project module by providing the input. The primary objective is to test the module interfaces in order to ensure that no errors are occurring when one module invokes the other module.

b. UNIT TESTING Unit testing is undertaken when a module has been created and successfully reviewed.In order to test a single module we need to provide a complete environment i.e. besides the module we would require

- The procedures belonging to other modules that the module under test calls
- Non local data structures that module accesses
- A procedure to call the functions of the module under test with appropriate parameters Unit testing was done on each and every module that is described under module description.

7.1 Test Cases and Test Results

Test ID	Test Case Title	Test Condition	System Behavior	Expected Result
T01	Registration	The employee must be able to register themselves.	Registered successfully and dashboard option displayed depending on user type.	Registered successfully and move on Login page.

T02	Login	Faculty, HOD, Director must be able to login before doing any CRUD operation.	Login successfully with valid credentials and login failed with invalid credentials.	Login successfully and direct to dashboard.
T03	Director - Add personal detail	Add personal detail to their profile.	Details added successfully.	Details added successfully.
T04	Director - View all leave application	View leave application of each department HOD.	Leave application of each department HOD is displayed.	Leave application of each department HOD is displayed.
T05	Director - Accept leave application	Accept leave applications of HOD.	Accepted successfully.	Accepted successfully.
T06	Director - Reject leave application	Reject leave applications of HOD.	Rejected successfully.	Rejected successfully.
T07	HOD - Add personal detail	Add personal detail to their profile.	Details added successfully.	Details added successfully.
T08	HOD - View all leave application	View leave application of each faculty.	Leave application of each faculty is displayed.	Leave application of each faculty is displayed.
T09	HOD - Accept leave application	Accept leave applications of faculty.	Accepted successfully.	Accepted successfully.
T010	HOD - Reject leave application	Reject leave applications of faculty.	Rejected successfully.	Rejected successfully.
T011	HOD - View their leave application	Check Status of leave application.	Accepted or Rejected leave application.	Accepted or Rejected leave application.
T012	Faculty - Add personal detail	Add personal detail to their profile.	Details added successfully.	Details added successfully.
T013	Faculty - View their leave application	Check Status of leave application.	Accepted or Rejected leave application.	Accepted or Rejected leave application.

7.2 Sample of a Test Case

Title: Login Page – Authenticate Successfully on Login Page.
Description: A registered user should be able to successfully login based on their role. Role can be Faculty, Admin, HOD or Director.

Precondition: The user must already be registered with an Username and password.

Assumption: A supported browser is being used.

Test Steps:

1. Navigate to web application with address
2. In the 'Username' field, enter the username of the registered user
3. Enter the password of the registered user
4. Click 'Log In'

Expected Result: User logged in successfully and redirected to home page. Dashboard with user type option visible on the navigation bar with log out option on far right of navbar

Actual Result: It should show the dashboard of user where they can use other feature like view profile and view leave application status.

Chapter 8

Screenshots of Project

8.1 Registration and Login Page

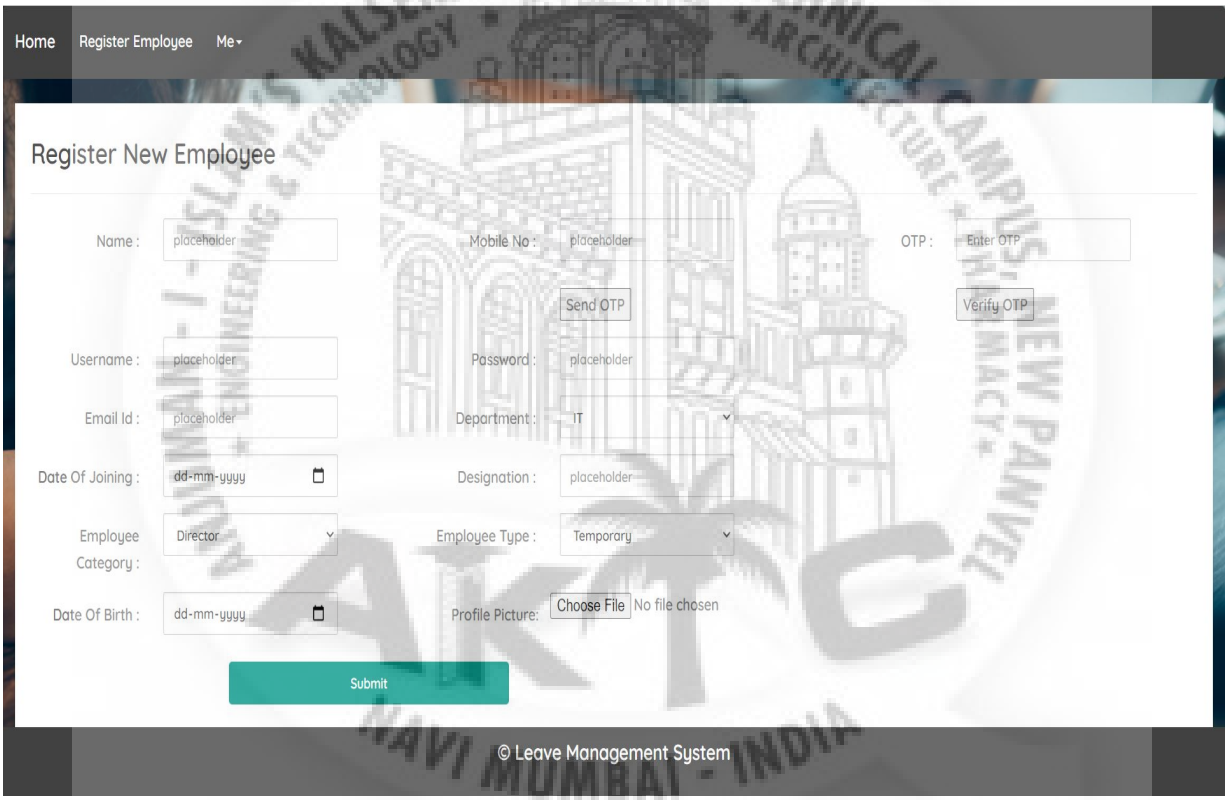

Figure 8.1: Registration Page

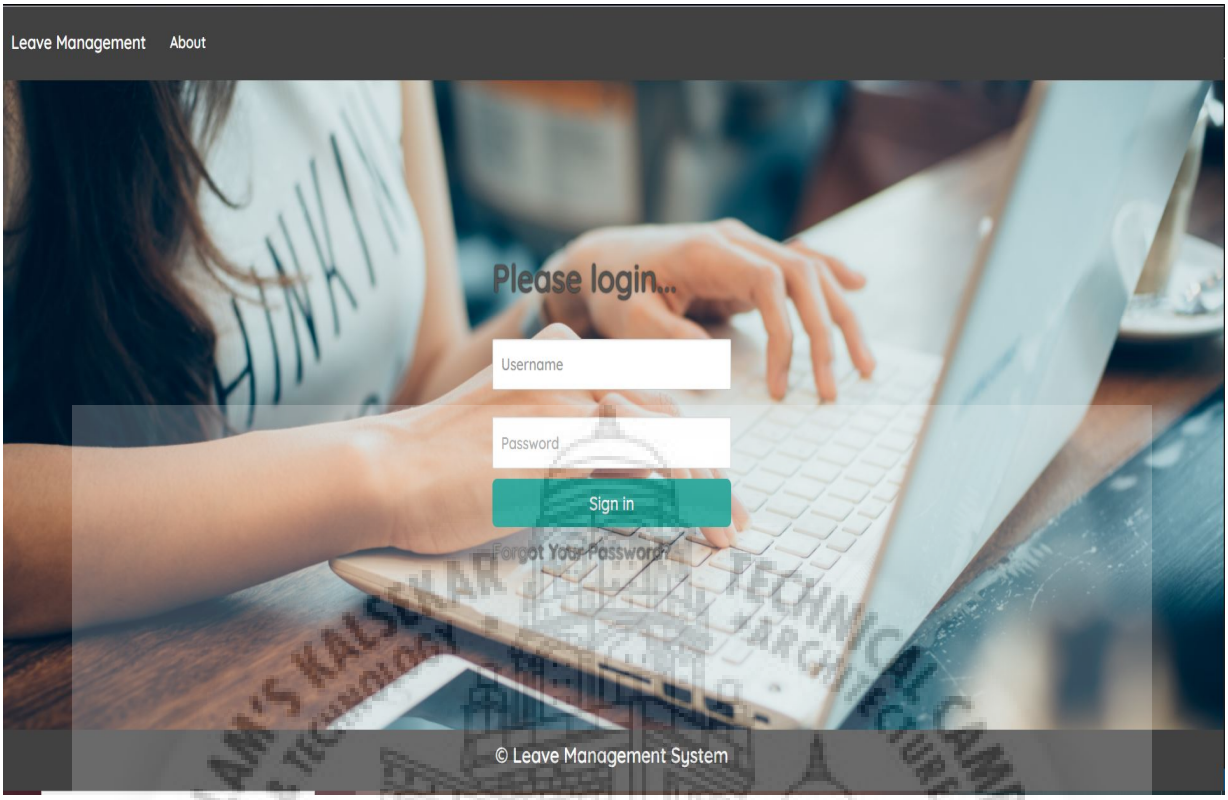

Figure 8.2: Login Page

Figure 8.3: Change Password Page

8.2 Employee Profile Page

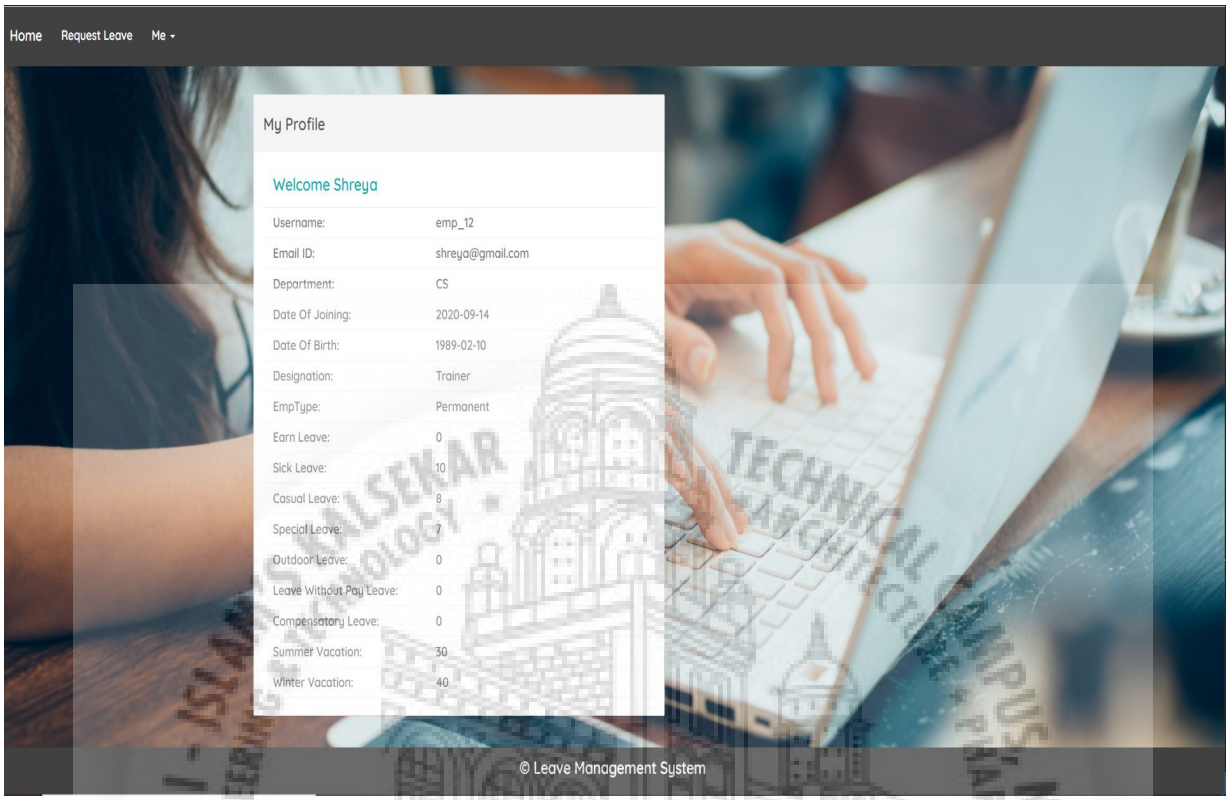

Figure 8.4: Employee's Profile Page

8.3 Apply Leave and Leave Request Page

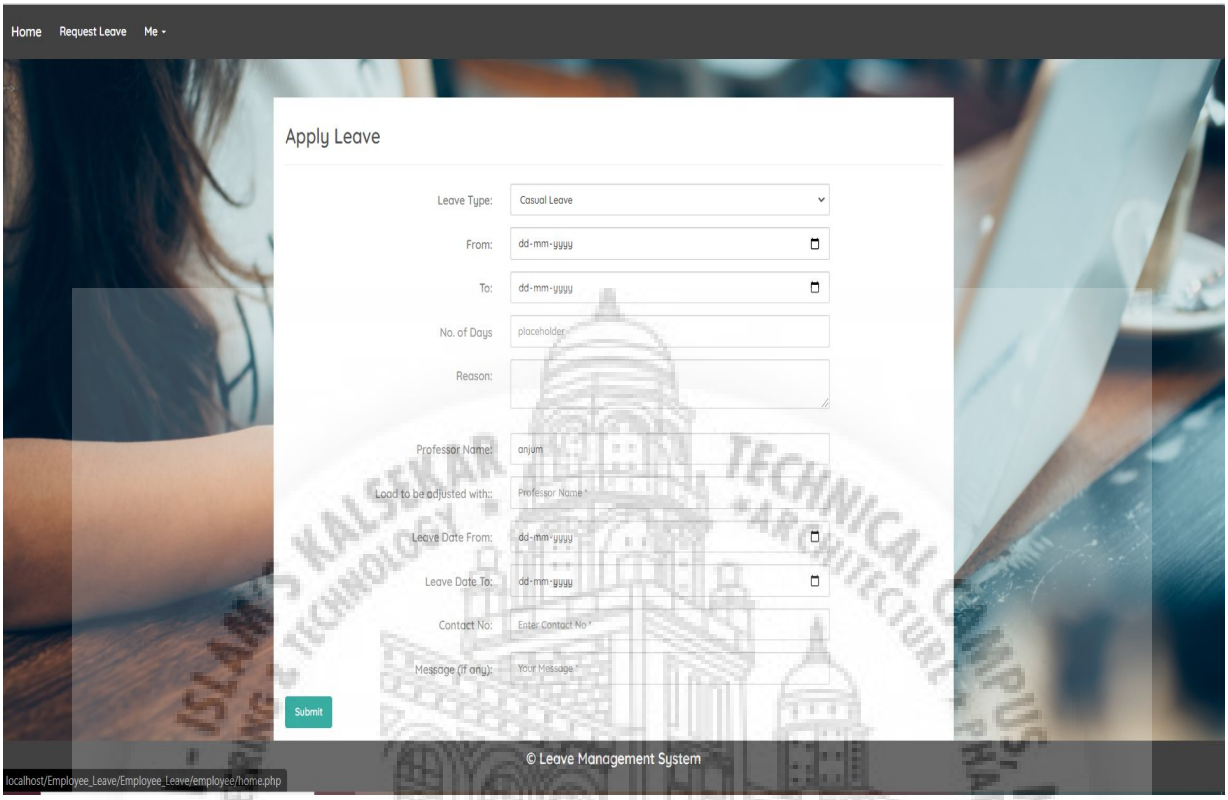

Figure 8.5: Apply Leave Page

Figure 8.6: All Leave Requests of Employees in HOD Profile

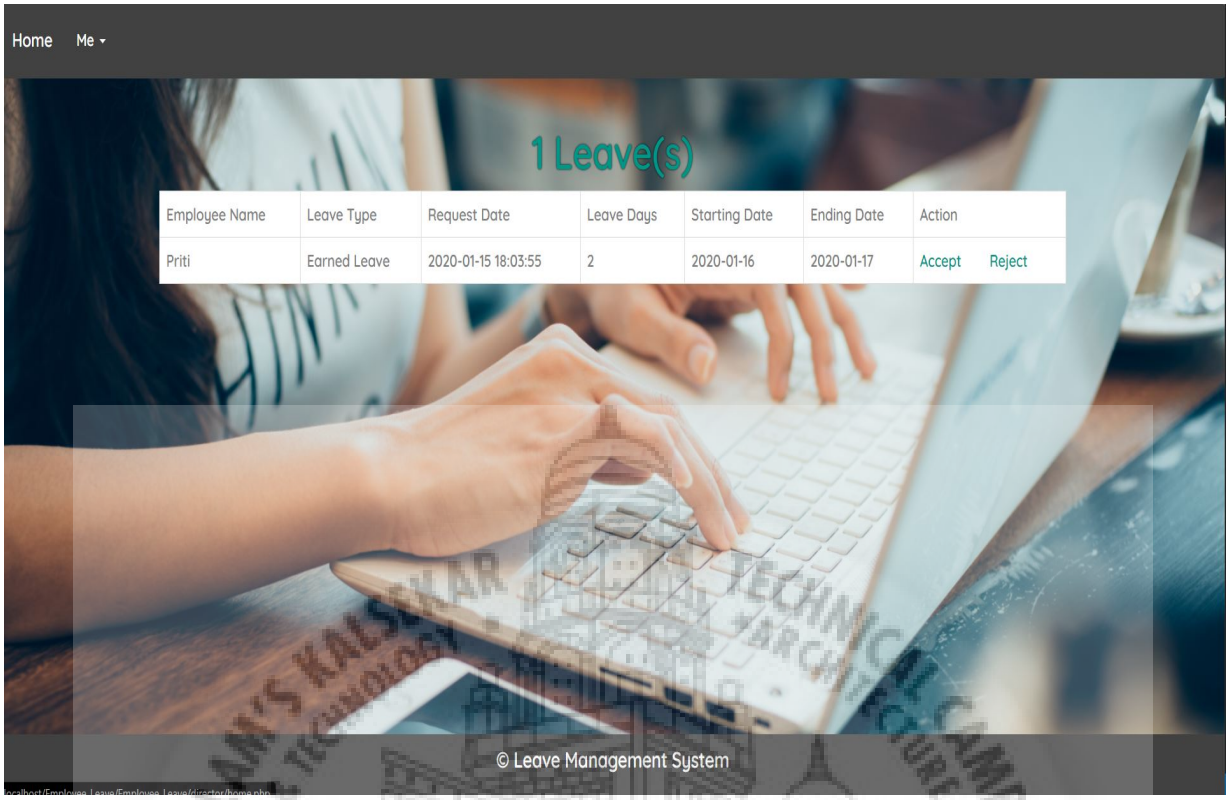

Figure 8.7: All HOD's Leave Request

8.4 View and Delete Employee

Figure 8.8: View All Employee's Page

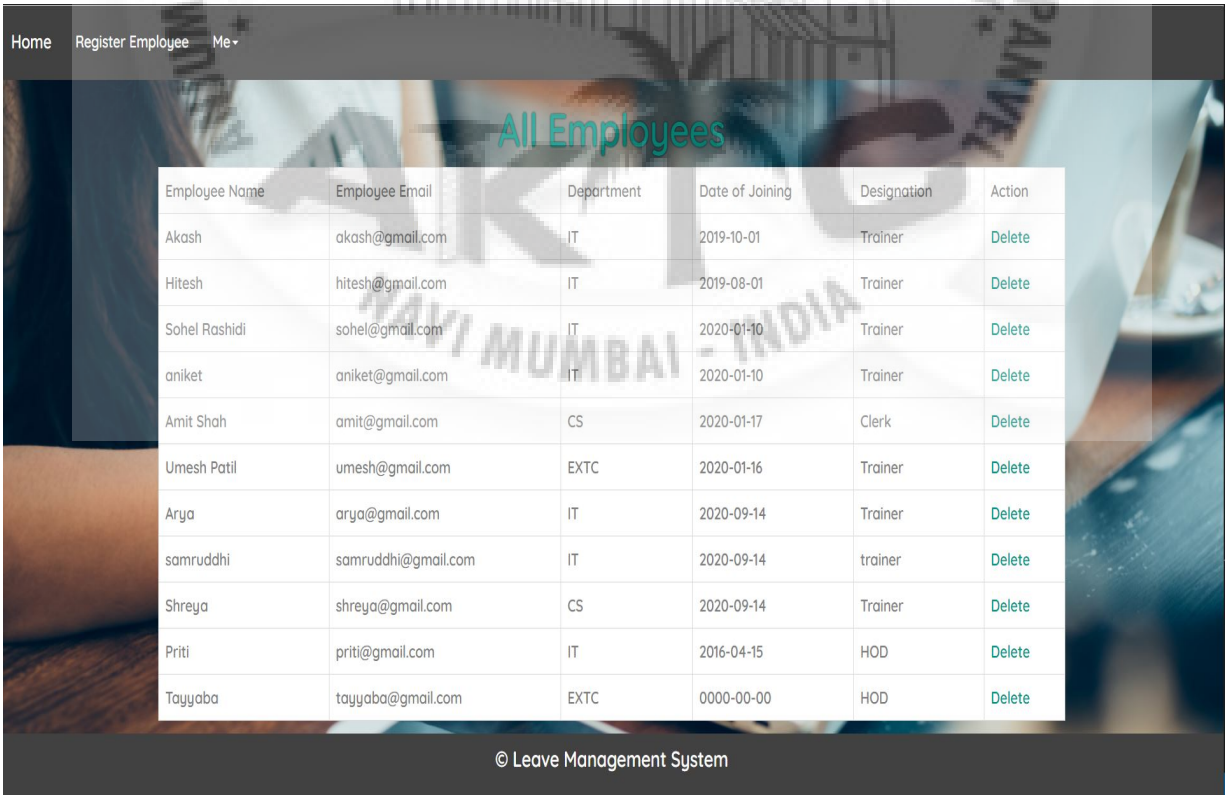

Figure 8.9: Delete An Employee Page

Chapter 9

Conclusion and Future Scope

9.1 Conclusion

Leave Management System is very useful for college to maintain the leave records of the staff and it also maintains the leave applications of the staff. This system is to decrease the paper work and easier record maintenance by having a particular website for leaves maintenance. This can be deal with the record of leaves taken by faculties and higher authorities may accept or reject the leave applications requested by the staff. This system also approach to reduce the formalities and time delay facing by faculty members for the approval of leave. Leave Management System for various type of organisation can help in reducing paperwork and help achieve error free tabulation of leaves.

9.2 Future Scope

- The leave which have not been availed by the faculties in the given session can be automatically carried forward to the next working session.
- The summarised data generated by this system can be further provided to different departments, for example, Finance, Accounts for direct calculation of salaries.

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[1] *HR e-Leave Tour Management System at RDCIS, SAIL*; S Selvi, Manas Rath, N K Sinha, S P Singh, N N J Hemron, A Bhattacharya, A K Biswal, International Conference on Information Technology, June-2014.

[2] *Cloud Based Web Application with NFC for Employee Attendance Management System*; Sai Ba Oo, Nang Hlaing Myat Oo, Suparat Chainan, Arpha Thongniam, Waralak Chongdarakul, June 2018.

[3] *E-Notifier: Transport Information Services in Colleges and Exploring Mobile Notification*; Pandore Yogesh Bandopant, April 2016.

Achievements

1. Publications
   (a) *Leave Management System for AIKTC*; Khalfe Aynas Abdul Majid Zeenat, Choudhary Nameera Ajaz Ruksana, Khan Yaman Mohammad Ali Nasreen Fatima, Prof. Mukhtar Ansari, International Research Journal of Engineering and Technology (IRJET), March 03, 2020 (`https://www.irjet.net`)
2. Project Competitions
   (a) *Leave Management System for AIKTC*; Khalfe Aynas Abdul Majid Zeenat, Choudhary Nameera Ajaz Ruksana, Khan Yaman Mohammad Ali Nasreen Fatima, Prof. Mukhtar Ansari, Techxter 9.0, National Level Technical Paper Presentation Competition , February 29, 2020 (Venue : SIES Graduate School of Technology, Nerul, Navi Mumbai)

e-ISSN: 2395-0056 p-ISSN: 2395-0072

International Research Journal of Engineering and Technology (IRJET)

(An ISO 9001 : 2008 Certified Journal)

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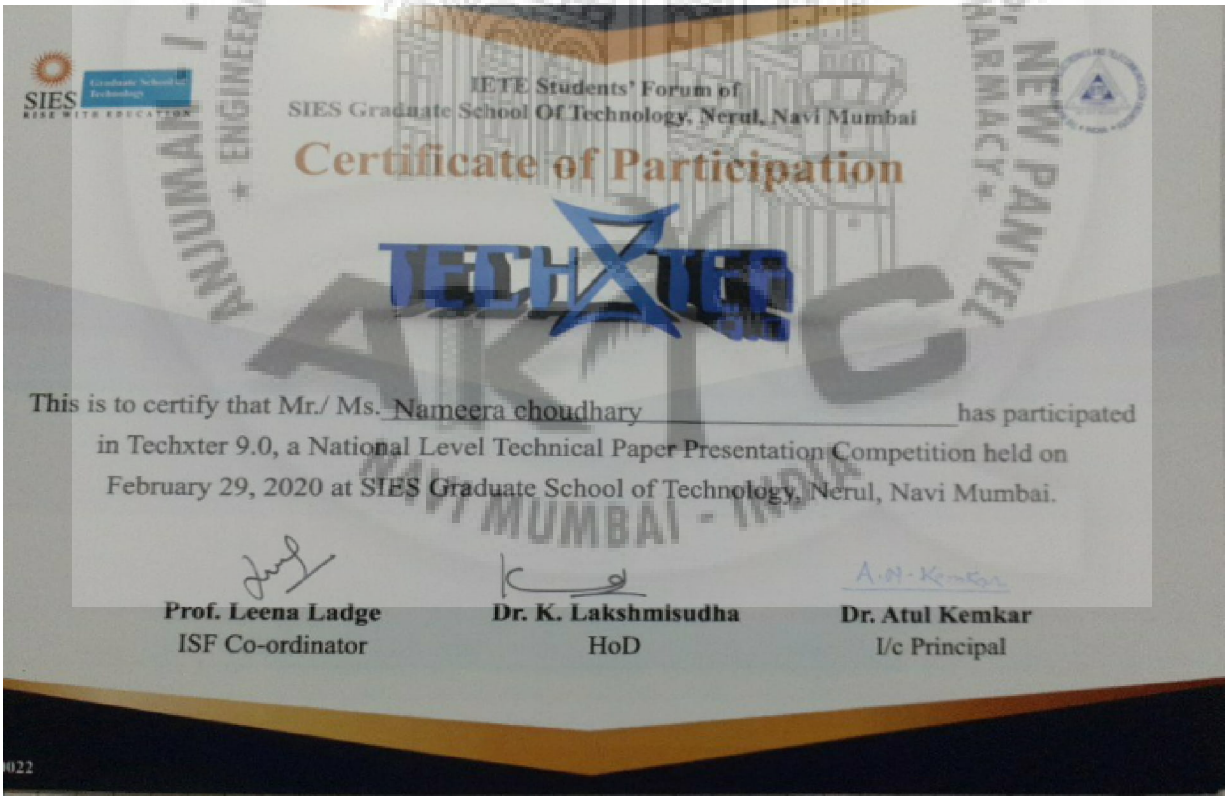
TEX20039



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