

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

JNANA SANGAMA, BELAGAVI – 590 018



A Mini Project Report on

“Employee Leave Management System”

Submitted in partial fulfillment of the requirements as a part of the Web Technology and
its Application Laboratory for the award of degree of

Bachelor of Engineering in Computer Science and Engineering

Submitted by

NAME	USN
TUSHAR KUMBAR	2KL17CS111
MD SOHAIL SANADI	2KL17CS108

Faculty In charge

Mr. Chandrashekhar K

Assistant Professor

Dept. of Computer Science and Engineering



Department of Computer Science and Engineering

KLE Dr. M. S. Sheshgiri

College of Engineering and Technology

Udyambag, Belagavi.590008, Karnataka, India

2020 – 2021



KLE DR M S Sheshgiri College of Engineering and Technology
Belagavi.590008, Karnataka, India

Ph:-0831-2440322

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING



CERTIFICATE

This is to certify that the mini project report entitled “**Employee Leave Management System**” has been successfully completed by **Tushar Kumbar (2KL17CS111), Md Sohail Sanadi (2KL17CS108)**, in partial fulfillment of the requirements as a part of the **Web Technology and it's Applications** Laboratory for the award of the degree of **Bachelor of Engineering in Computer Science and Engineering** under Visvesvaraya Technological University, Belagavi during academic year **2020 – 2021**. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The mini project report has been approved as it satisfies the academic requirements as a part of Web Technology and its application for the said degree.

Faculty In charge

HOD CSE

Principal

External Viva

Name of the Examiners

Signature with date

1. _____

2. _____

ACKNOWLEDGMENT

I have taken efforts of this project. However, it's would have not been possible with the kind support and help of many individuals and organizations. I would like extended my sincere thanks to all of them.

I am highly indebted to **Prof. Chandrashekhar K** for his guidance and constant supervision as well as for providing necessary information regarding the project & also for his support in completing the project.

I would like to express my gratitude towards my parents & members of KLE, Dr.M.S.SHESHGIRI COLLEGE OF ENGINEERING & TECHNOLOGY for their kind co-operation and encouragement which help me in completion of this project. I would like to express my special gratitude and thanks to institute for giving me such attention and time.

My thanks and appreciations also go to my colleague in developing the project and people who have willingly helped me out with their abilities.

Table of Contents

- 1 INTRODUCTION**
- 2 SYSTEM ANALYSIS**
 - 2.1 Scope of the Project
 - 2.2 Aim of Project
 - 2.3 Hardware and Software Requirement
- 3 SYSTEM DESIGN**
 - 3.1 System Perspective
 - 3.1.1 Architecture Diagram
 - 3.1.2 Data flow Diagram
 - 3.1.3 ER Diagram
 - 3.1.4 Use case Diagram
- 4 IMPLEMENTATION.**
 - 4.1 Discussion of code segment
 - 4.2 Database connection.
 - 4.3 Modules explanation
 - 4.4 Output design
 - 4.5 Software Testing
- 5 DISCUSSION OF THE RESULTS.**
 - 5.1 Screen Shots
- 6 CONCLUSION AND FUTURE ENHANCEMENT**
- 7 REFERENCES**

ABSTRACT

The purpose of Employee Leave Management System is to automate the existing manual system by the help of computerized equipments and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. The required software and hardware are easily available and easy to work with. Employee Leave Management System, as described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus it will help organization in better utilization of resources. The organization can maintain computerized records without redundant entries. That means that one need not be distracted by information that is not relevant, while being able to reach the information. The aim is to automate its existing manual system by the help of computerized equipments and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. Basically the project describes how to manage and maintain the record of applying and approving the leaves in the organisation .

Chapter 1

INTRODUCTION

The "Employee Leave Management System" has been developed to override the problems prevailing in the practicing manual system. In this system we will be giving admin the privilege to add or remove employees and approve or reject the leave demands of the employee, also the employee can update his/her profile and apply for leaves. This software is supported to eliminate and in some cases reduce the hardships faced by this existing system. Moreover this system is designed for the particular need of the company to carry out operations in a smooth and effective manner. The application is reduced as much as possible to avoid errors while entering the data. No formal knowledge is needed for the user to use this system. Thus by this all it proves it is user-friendly. Employee Leave Management System , as described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus it will help organization in better utilization of resources. Every organization, whether big or small, has challenges to overcome and managing the information of Leaves and Employees. Every Employee Leave Management System has different Employee needs, therefore we design exclusive employee management systems that are adapted to your managerial requirements. This is designed to assist in strategic planning, and will help you ensure that your organization is equipped with the right level of information and details for your future goals. Also, for those busy executive who are always on the go, our systems come with remote access features, which will allow you to manage your workforce anytime, at all times. These systems will ultimately allow you to better manage resources.

Chapter 2

SYSTEM ANALYSIS

2.1 Scope of the Project

It may help collecting perfect management in details. In a very short time, the collection will be obvious, simple and sensible. It will help a person to know the management of passed year perfectly and vividly. It also helps in current all works relative to Employee Leave Management System. It will be also reduced the cost of collecting the management & collection procedure will go on smoothly.

2.2 Aim of Project

Our project aims at Business process automation, i.e. we have tried to computerize various processes of Employee Leave Management System.

- In computer system the person has to fill the various forms & number of copies of the forms can be easily generated at a time.
- In computer system, it is not necessary to create the manifest but we can directly print it, which saves our time.
- To assist the staff in capturing the effort spent on their respective working areas.
- To utilize resources in an efficient manner by increasing their productivity through automation.

2.3 Hardware and Software Requirement

2.3.1 Hardware Configuration

Processor	:	Intel i3 and above or equivalent
Processor Speed	:	250MHz to 833MHz
RAM	:	512MB RAM
Hard Disk	:	2GB

2.3.2 Software Configuration

Operating System	:	Windows 7
Database	:	MySQL Server
Server side scripting	:	PHP
Client side scripting	:	JAVASCRIPT

Chapter 3

SYSTEM DESIGN

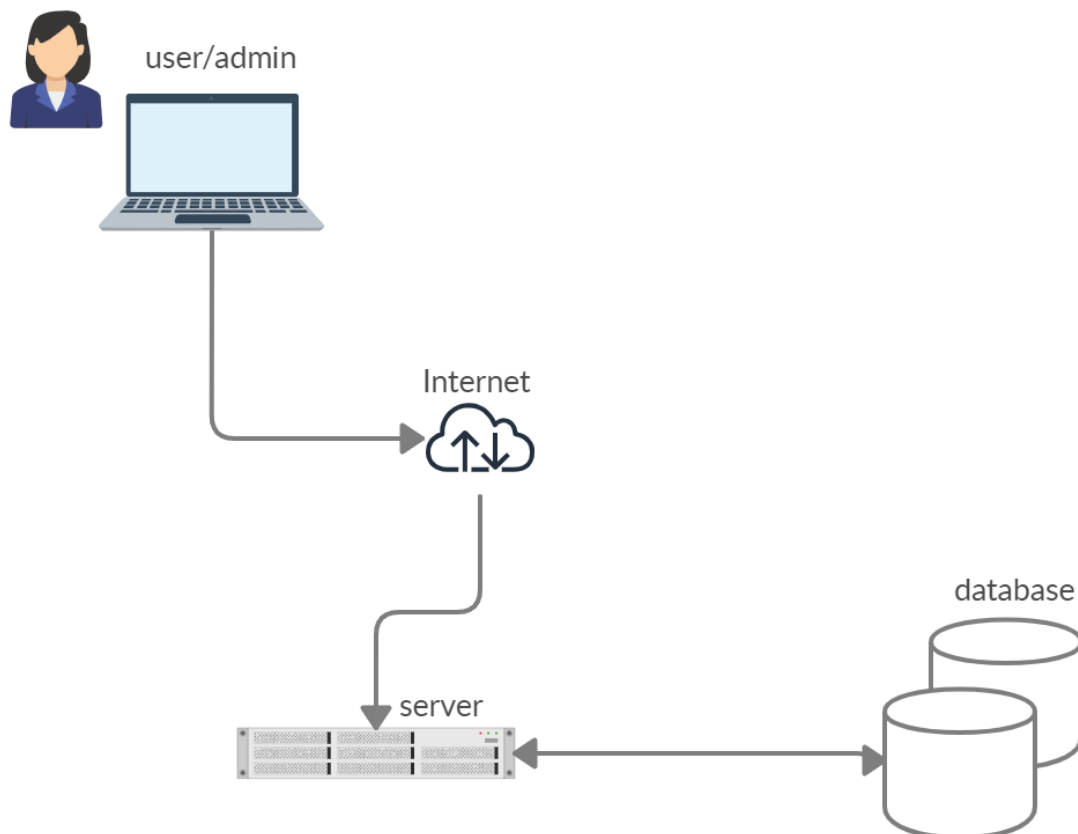
3.1 System Perspective:

System analysis will be performed to determine if it is feasible to design information based on policies and plans of the organization and on user requirements and to eliminate the weaknesses of the present system.

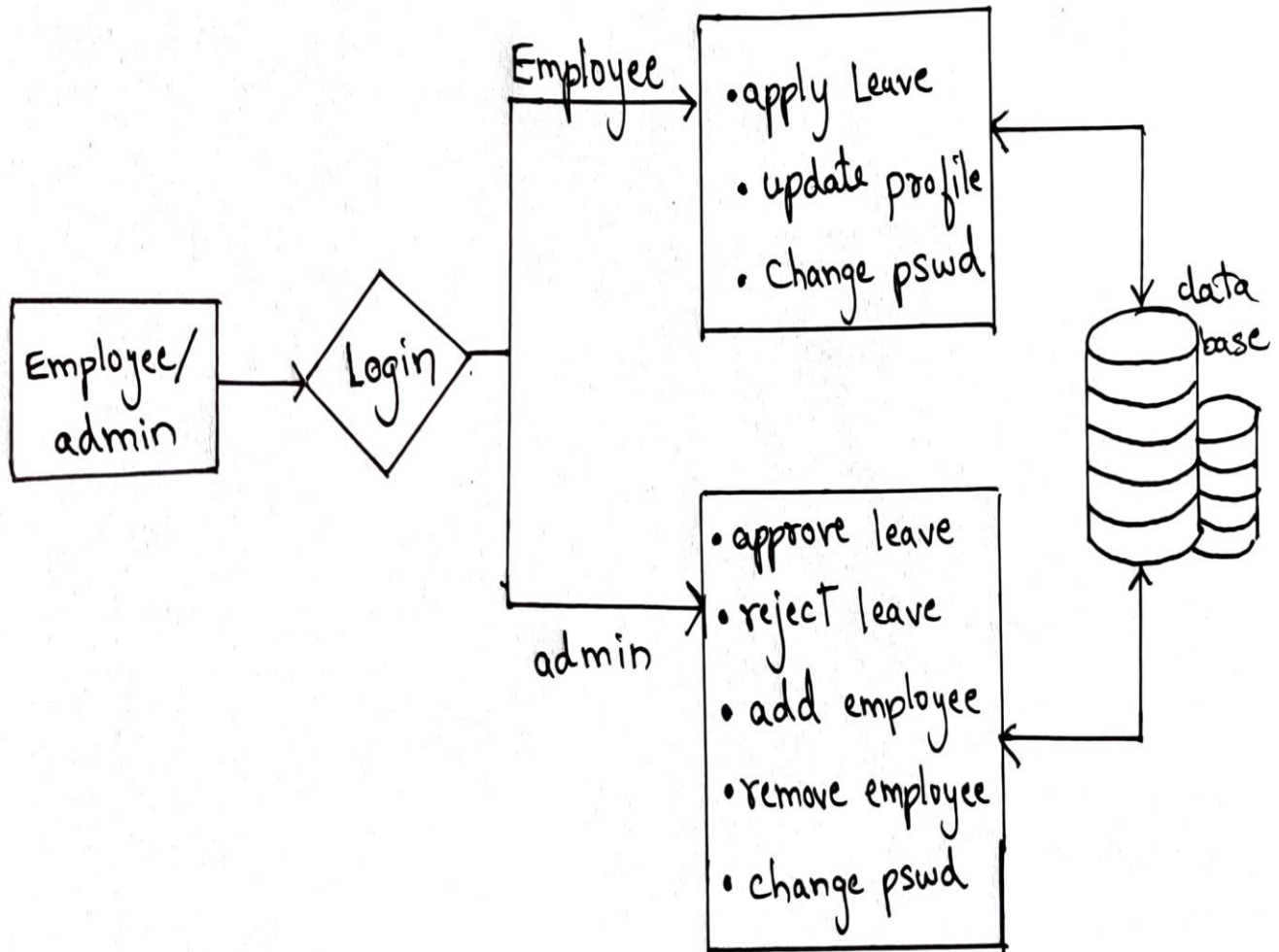
- The new system should be cost effective.
- To augment management, improve productivity and services.
- To enhance user / system interface.
- To improve information quality and usability.

To upgrade systems reliability, availability, flexibility and growth potential

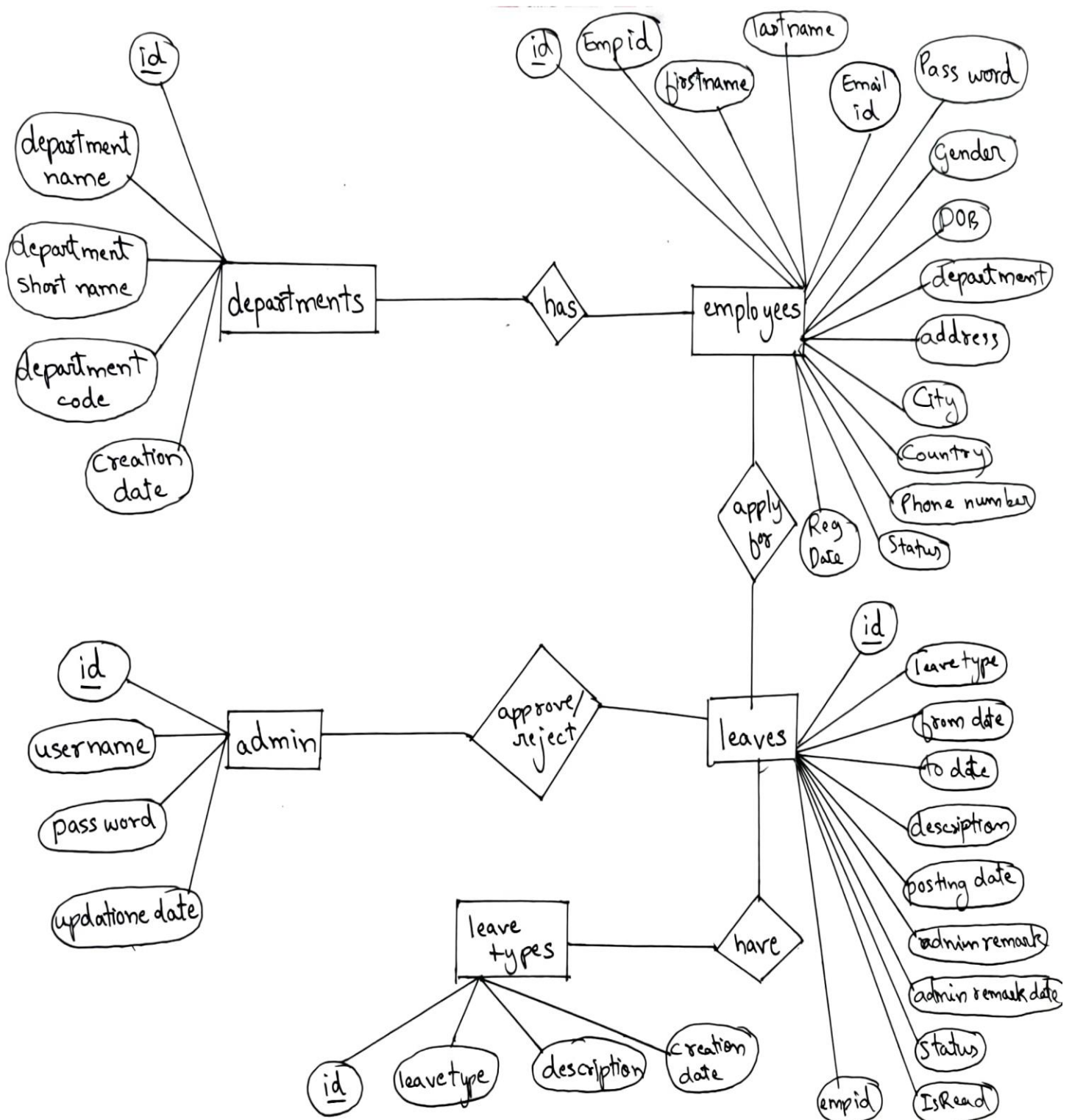
3.1.1 Architecture Diagram



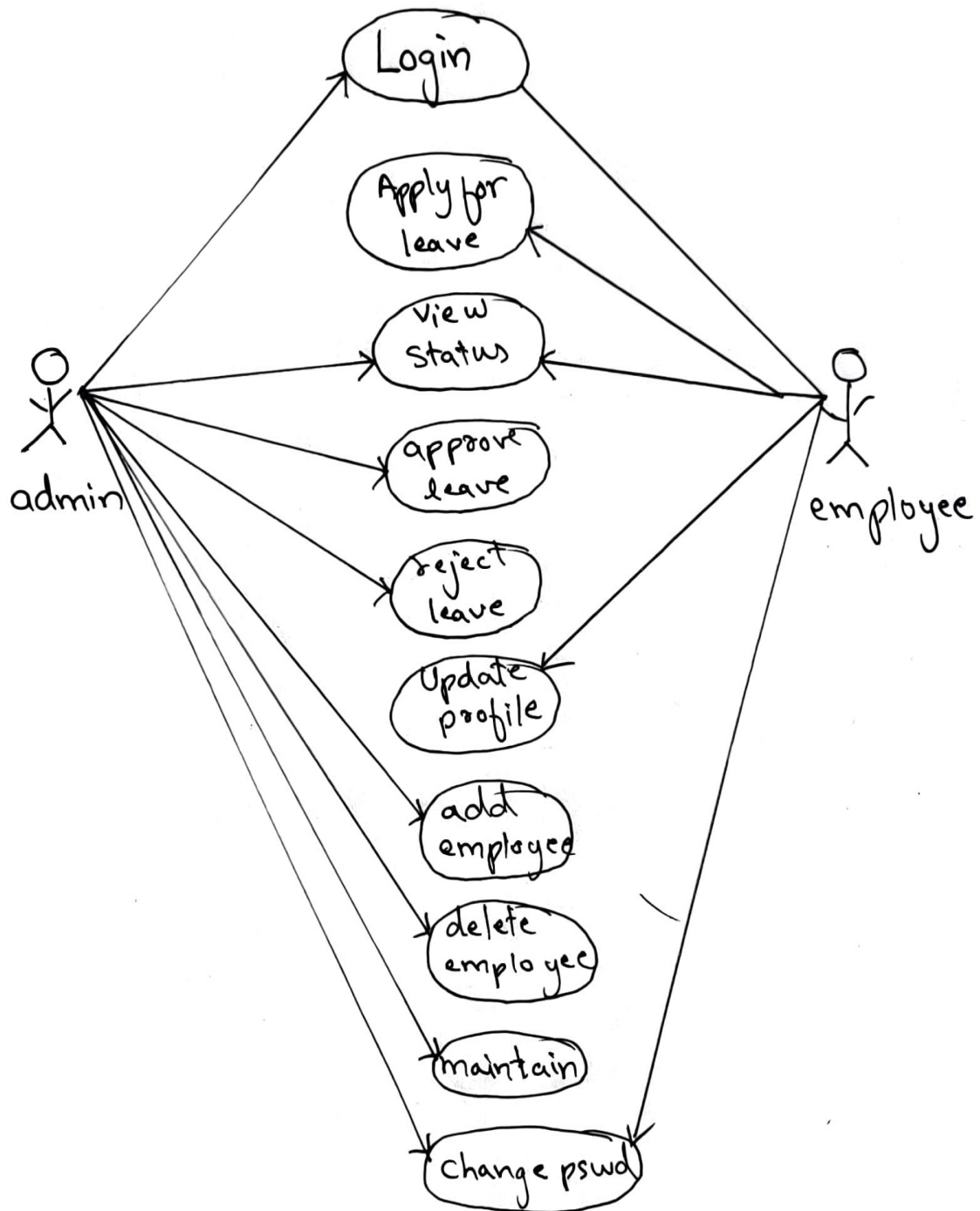
3.1.2 Data flow Diagram



3.1.3 ER-Diagram



3.1.4 Use Case Diagrams



Chapter 4

IMPLEMENTATION

4.1 Discussion of code segment

index.php

```
<?php
session_start();
error_reporting(0);
include('includes/config.php');
if(isset($_POST['signin']))
{
$username=$_POST['username'];
$password=$_POST['password'];
$sql="SELECT EmailId,Password,Status,id FROM tblemployees WHERE EmailId=:uname
and Password=:password";
$query= $dbh -> prepare($sql);
$query-> bindParam(':uname', $uname, PDO::PARAM_STR);
$query-> bindParam(':password', $password, PDO::PARAM_STR);
$query-> execute();
$results=$query->fetchAll(PDO::FETCH_OBJ);
if($query->rowCount() > 0)
{
    foreach ($results as $result) {
        $status=$result->Status;
        $_SESSION['eid']=$result->id;
    }
}
if($status==0)
{
    $msg="Your account is Inactive. Please contact admin";
} else{
    $_SESSION['emplogin']=$_POST['username'];
    echo "<script type='text/javascript'> document.location = 'emp-changepassword.php';
```

```
</script>";
} }
else{
    echo "<script>alert('Invalid Details');</script>";
}
}
?>
<!DOCTYPE html>
<html lang="en">
    <head>
        <!-- Title -->
        <title>ELMS | Home Page</title>
        <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.0/css/bootstrap.min.css">
        <meta name="viewport" content="width=device-width, initial-scale=1.0, maximum-
scale=1.0, user-scalable=no"/>
        <meta charset="UTF-8">
        <meta name="description" content="Responsive Admin Dashboard Template" />
        <meta name="keywords" content="admin,dashboard" />
        <meta name="author" content="Steelcoders" />

        <!-- Styles -->
        <link type="text/css" rel="stylesheet"
href="assets/plugins/materialize/css/materialize.css"/>
        <link href="assets/css/materialdesign.css" rel="stylesheet">
        <link href="assets/plugins/material-preloader/css/materialPreloader.min.css"
rel="stylesheet">
        <!-- Theme Styles -->
        <link href="assets/css/alpha.min.css" rel="stylesheet" type="text/css"/>
        <link href="assets/css/style.css" rel="stylesheet" type="text/css"/>
    </head>
    <body>
        <nav class="navbar navbar-expand-lg navbar-light py-3">
            <button class="navbar-toggler" type="button" data-toggle="collapse" data-
```

```
target="#navbarNavAltMarkup" aria-controls="navbarNavAltMarkup" aria-
expanded="false" aria-label="Toggle navigation">
    <span class="navbar-toggler-icon"></span>
    </button>
    <div class="collapse navbar-collapse d-flex justify-content-center align-items-center"
id="navbarNavAltMarkup">
    <div class="navbar-nav d-flex justify-content-center align-items-center">
        <a class="nav-item text-white font-weight-bold nav-link ml-3" href="admin/">Admin
Login</a>
        <a class="nav-item text-white font-weight-bold nav-link ml-3"
href="index.php">Employee Login</a>
    </div>
    </div>
</nav>
    <main class="mn-inner mt-5">
        <div class="row d-flex justify-content-center align-items-center">
<h4 class="font-weight-bold text-center text-danger">Welcome to ELMS</h4>
        <div class="col-md-12">
            <div class="row">
                <div class="col-md-3"></div>
                <div class="col-md-6 d-flex justify-content-center align-items-center">
                    <div class="card white darken-1">
                        <div class="card-content ">
                            <span class="card-title text-danger" style="font-
size:20px;">Employee Login</span>
                            <?php if($msg){ ?><div
class="errorWrap"><strong>Error</strong> : <?php echo htmlentities($msg); ?>
</div><?php } ?>
                        <div class="row">
                            <form class="col col-md-12 " name="signin" method="post">
                                <div class="input-field col s12">
                                    <input id="username" type="text" name="username"
class="validate" autocomplete="off" required >
                                    <label for="email">Enter Registered Email Id</label>
```

```
</div>
<div class="input-field col col-md-12">
  <input id="password" type="password" class="validate"
name="password" autocomplete="off" required>
  <label for="password">Enter Password</label>
</div>
<div class="col col-md-12 center m-t-sm">
  <input type="submit" name="signin" value="Login" class="
waves-effect waves-light btn ">
  <a class="waves-effect waves-grey" href="forgot-
password.php" style="margin-bottom: 10px; margin-left: 10px;">Emp Password
Recovery?</a>
</div>
</form>
</div>
</div>
</div>
</div>
<div class="col-md-3"></div>
</div>
</div>
</div>
</main>
<!-- Javascripts -->
<script src="assets/plugins/jquery/jquery-2.2.0.min.js"></script>
<script src="assets/plugins/materialize/js/materialize.min.js"></script>
<script src="assets/plugins/material-preloader/js/materialPreloader.min.js"></script>
<script src="assets/plugins/jquery-blockui/jquery.blockui.js"></script>
<script src="assets/js/alpha.min.js"></script>
</body>
</html>
```


4.2 Database connection

A database management, or DBMS, gives the user access to their data and helps them transform the data into information. Such database management systems include dBase, paradox, IMS, Sql Server and SQL Server. These systems allow users to create, update and extract information from their database.

A database is a structured collection of data. Data refers to the characteristics of people, things and events. SQL Server stores each data item in its own fields. In SQL Server, the fields relating to a particular person, thing or event are bundled together to form a single complete unit of data, called a record (it can also be referred to as raw or an occurrence). Each record is made up of a number of fields. No two fields in a record can have the same field name.

4.3 Modules explanation

HTML

(Hyper Text Markup Language) is the most basic building block of the Web. It defines the meaning and structure of web content. "Hypertext" refers to links that connect web pages to one another, either within a single website or between websites. HTML uses "markup" to annotate text, images, and other content for display in a Web browser. HTML markup includes special "elements" such as <footer>, <article>, <section>, <p>, <div>, , , <aside>, <audio>, <canvas>, <datalist>, <details>, <embed>, <nav>, <output>, <progress>, <video>, , , and many others.

CSS

Cascading Style Sheets, fondly referred to as CSS, is a simple design language intended to simplify the process of making web pages presentable.

CSS handles the look and feel part of a web page. Using CSS, you can control the colour of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colors are used, layout designs, variations in display for different devices and screen sizes as well as a variety of other effects.

PHP

Hypertext Preprocessor (or simply PHP) is a general-purpose programming language originally designed for web development. PHP code may be executed with a command line interface (CLI), embedded into HTML code, or used in combination with various web template systems, web content management systems, and web frameworks. PHP code is usually processed by a PHP interpreter implemented as a module in a web server or as a Common Gateway Interface (CGI) executable.

JAVASCRIPT

JavaScript is used for relatively simple functions such as popping up new windows, or checking the information you type into a form to make sure it conforms to what the receiving database expects. So, for example, it will make sure that you have filled in all the required information or that the postcode you've typed in is complete. Many people disable JavaScript in their browsers because it can pose security risks. But some websites, especially social networking sites like Facebook, will not work as well.

4.4 Software Testing

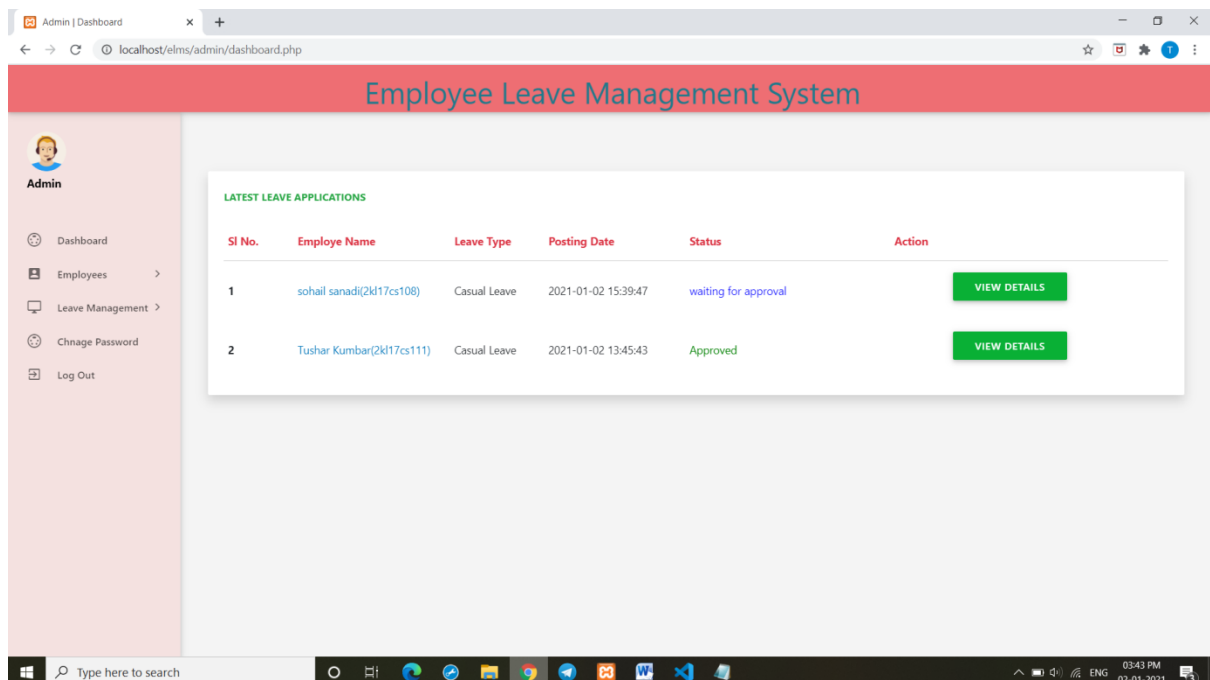
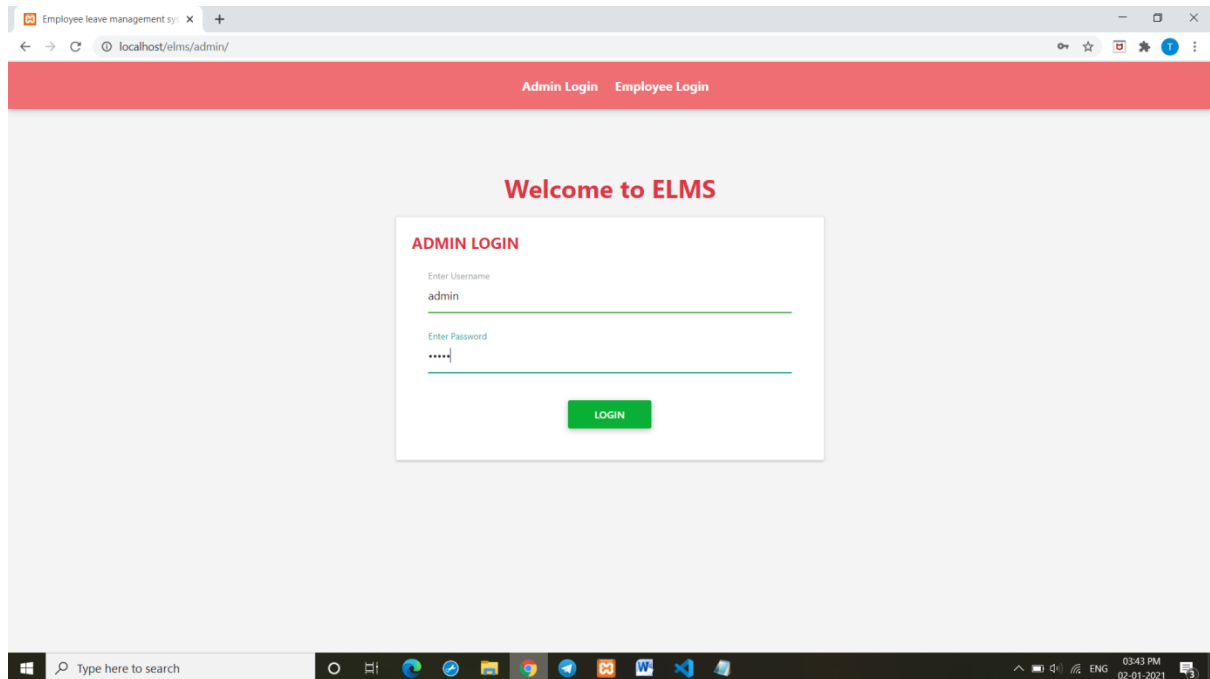
The testing done here was System Testing—checking whether the user requirements were satisfied. The code for the new system has been written completely using JSP as the coding language, HTML as the interface for front-end designing and Java Script for validating the client-side applications. The new system has been tested well with the help of the users and all the applications have been verified from every nook and corner of the user.

Although some applications were found to be erroneous these applications have been corrected before being implemented. The flow of the forms has been found to be very much in accordance with the actual flow of data.

Chapter 5

DISCUSSION OF THE RESULTS

5.1 Screen Shots



EMPLOYEE LEAVE MANAGEMENT SYSTEM

Admin | Add Employee

localhost/elms/admin/addemployee.php

Employee Leave Management System

ADD EMPLOYEE

Employee Code(Must be unique)

Gender... Birthdate

First name Last name Department... Country

Email City/Town Address

Password Mobile number

Confirm password

ADD

Admin | Manage Employees

localhost/elms/admin/manageemployee.php

Employee Leave Management System

MANAGE EMPLOYEES

Show 10

Search records

Sl no	Emp Id	Emp Name	Department	Status	Reg Date	Action
1	2kl17cs108	sohail sanadi	Information Technology	ACTIVE	2021-01-02 13:37:42	Edit Delete
2	2kl17cs111	Tushar Kumbar	HUMAN RESOURCES	ACTIVE	2021-01-02 13:39:30	Edit Delete

Showing 1 to 2 of 2 entries

EMPLOYEE LEAVE MANAGEMENT SYSTEM

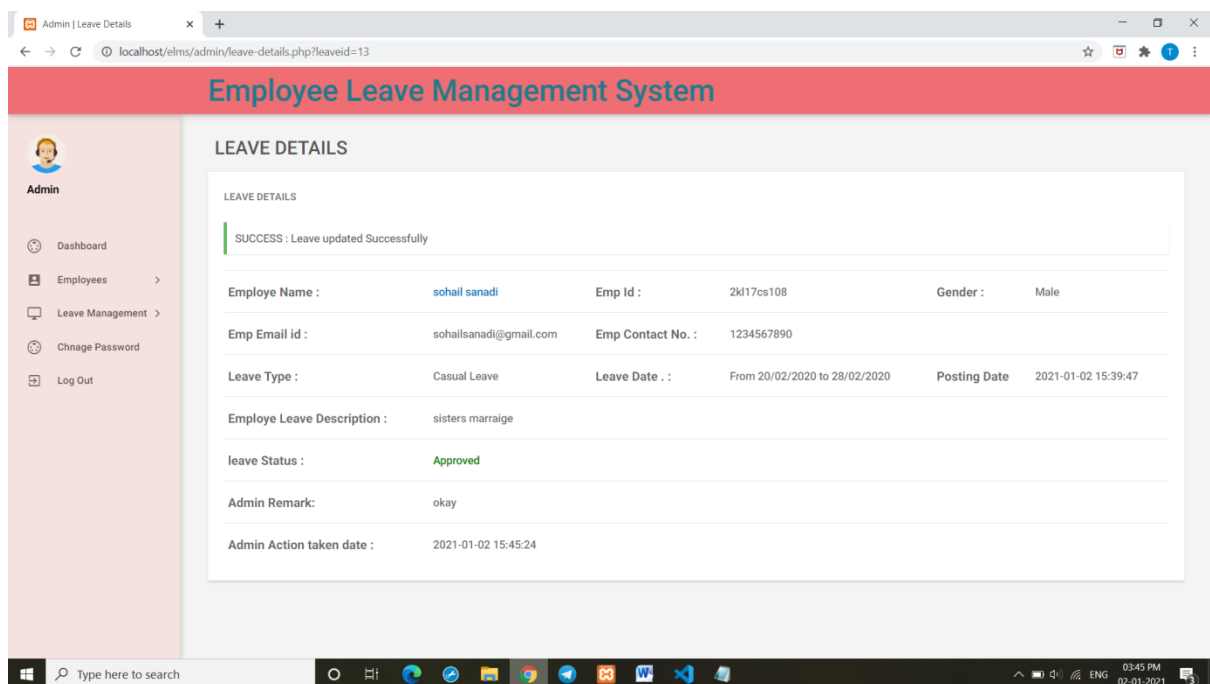
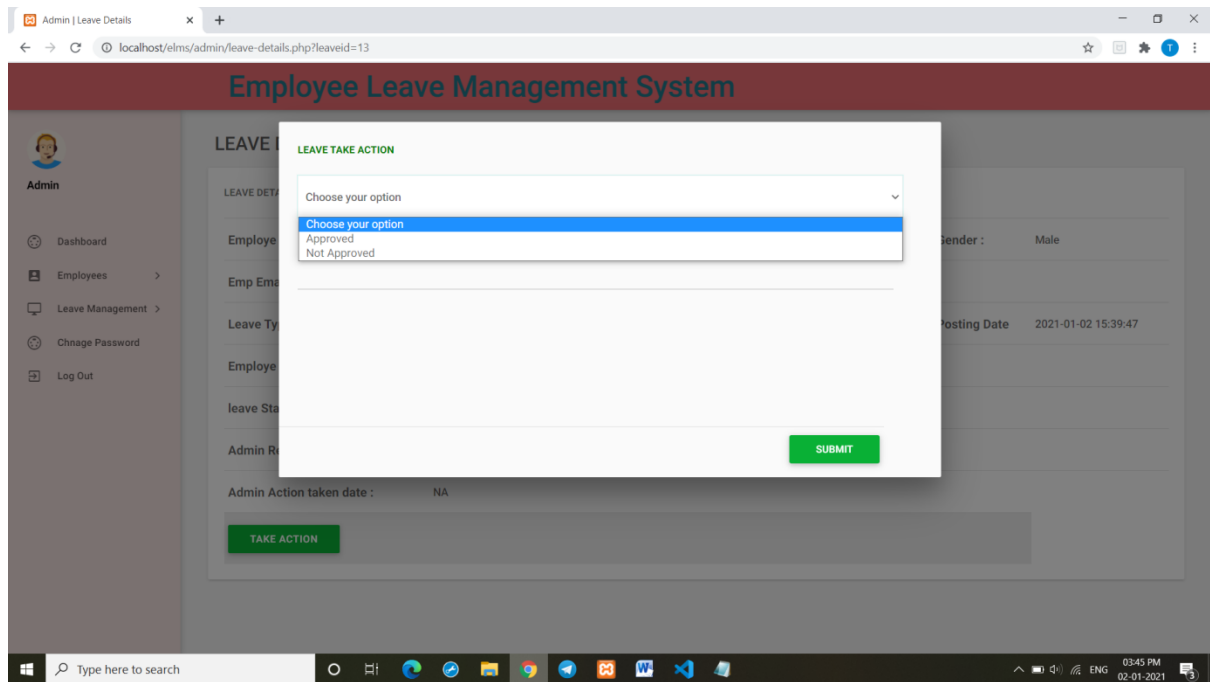
This screenshot shows the 'Pending Leave History' page of the Employee Leave Management System. The page features a sidebar with navigation links: Admin, Dashboard, Employees, Leave Management, Change Password, and Log Out. The main content area displays a table of pending leave requests. The table has columns for SI No., Employee Name, Leave Type, Posting Date, Status, and Action. A single entry is shown for employee 'sohail sanadi(2kl17cs108)' with a 'Casual Leave' posted on '2021-01-02 15:39:47', with a status of 'waiting for approval'. A 'VIEW DETAILS' button is available for this entry.

SI No.	Employee Name	Leave Type	Posting Date	Status	Action
1	sohail sanadi(2kl17cs108)	Casual Leave	2021-01-02 15:39:47	waiting for approval	VIEW DETAILS

This screenshot shows the 'Leave Details' page of the Employee Leave Management System. The sidebar is identical to the previous page. The main content area displays detailed information for a specific leave request. The details include Employee Name, Emp Id, Gender, Emp Email id, Emp Contact No., Leave Type, Leave Date, Posting Date, Employee Leave Description, leave Status, Admin Remark, and Admin Action taken date. A 'TAKE ACTION' button is located at the bottom of the details section.

LEAVE DETAILS					
Employee Name :	sohail sanadi	Emp Id :	2kl17cs108	Gender :	Male
Emp Email id :	sohailsanadi@gmail.com	Emp Contact No. :	1234567890		
Leave Type :	Casual Leave	Leave Date . :	From 20/02/2020 to 28/02/2020	Posting Date	2021-01-02 15:39:47
Employee Leave Description :	sisters marraige				
leave Status :	waiting for approval				
Admin Remark:	waiting for Approval				
Admin Action taken date :	NA				
TAKE ACTION					

EMPLOYEE LEAVE MANAGEMENT SYSTEM



EMPLOYEE LEAVE MANAGEMENT SYSTEM

The screenshot shows a web browser window with the title 'ELMS | Home Page' and the URL 'localhost/elms/index.php'. The page has a red header bar with 'Admin Login' and 'Employee Login' links. The main content area has a 'Welcome to ELMS' message. Below this is a white box titled 'EMPLOYEE LOGIN'. Inside the box, there are two input fields: 'Enter Registered Email Id' with the value 'sohailsanadi@gmail.com' and 'Enter Password' with masked characters '*****'. Below the password field is a green 'LOGIN' button and a blue link 'Emp Password Recovery?'. The Windows taskbar at the bottom shows the search bar and various application icons.

Admin Login Employee Login

Welcome to ELMS

EMPLOYEE LOGIN

Enter Registered Email Id
sohailsanadi@gmail.com

Enter Password

LOGIN Emp Password Recovery?

The screenshot shows a web browser window with the title 'Admin | Update Employee' and the URL 'localhost/elms/myprofile.php'. The page has a red header bar with 'Employee Leave Management System'. On the left is a sidebar with a user profile for 'sohail sanadi' (2k117cs108) and links for 'My Profiles', 'Change Password', 'Leaves', and 'Logout'. The main content area is titled 'UPDATE EMPLOYEE DETAILS' and contains a form with the following fields: 'Employee Code' (2k117cs108), 'First name' (sohail), 'Last name' (sanadi), 'Email' (sohailsanadi@gmail.com), 'Mobile number' (1234567890), 'Gender' (Male), 'Date of Birth' (2 January, 2021), 'Information Technology', 'City/Town' (Belgaum), 'Country' (India), and 'Address' (Ashok Nagar). A blue 'UPDATE' button is at the bottom right of the form. The Windows taskbar at the bottom shows the search bar and various application icons.

Employee Leave Management System

sohail sanadi
2k117cs108

My Profiles

Change Password

Leaves

Logout

UPDATE EMPLOYEE DETAILS

Employee Code
2k117cs108

First name
sohail

Last name
sanadi

Email
sohailsanadi@gmail.com

Mobile number
1234567890

Gender
Male

Date of Birth
2 January, 2021

Information Technology

City/Town
Belgaum

Country
India

Address
Ashok Nagar

UPDATE

EMPLOYEE LEAVE MANAGEMENT SYSTEM

Employee Leave Management System

sohail sanadi
2k17cs108

My Profiles
Change Password
Leaves
Logout

APPLY FOR LEAVE

From Date: 22/12/2020 To Date: 28/12/2020

Select leave type...

- Medical Leave
- Casual Leave
- Restricted Holiday

APPLY

Employee Leave Management System

sohail sanadi
2k17cs108

My Profiles
Change Password
Leaves
Logout

APPLY FOR LEAVE

From Date: 22/12/2020 To Date: 28/12/2020

Casual Leave

Description: sisters marriage

APPLY

EMPLOYEE LEAVE MANAGEMENT SYSTEM

Employee | Apply Leave

localhost/elms/apply-leave.php

Employee Leave Management System

sohail sanadi
2k17cs108

- My Profiles
- Change Password
- Leaves
- Logout

APPLY FOR LEAVE

SUCCESS: Leave applied successfully

From Date To Date

Select leave type...

Description

APPLY

Employee | Leave History

localhost/elms/leavehistory.php

Employee Leave Management System

sohail sanadi
2k17cs108

- My Profiles
- Change Password
- Leaves
- Logout

LEAVE HISTORY

Show 10

Search records

Sl No.	Type Of Leave	From	To	Description	Posting Date	Admin Remark	Status
1	Casual Leave	20/02/2020	28/02/2020	sisters marraige	2021-01-02 15:39:47	okay at 2021-01-02 15:45:24	Approved
2	Casual Leave	22/12/2020	28/12/2020	sisters marraige	2021-01-02 15:48:33	waiting for approval	waiting for approval

Showing 1 to 2 of 2 entries

Chapter 6

CONCLUSION

The proposed Leave Management System will make the whole leave management process efficient. Users will be able to know their leave status. The employees may be applying for leave from their home as well. This supporting software will help the management in decision making in case of leave related affairs. Moreover, it will ensure less paper works and as a result the whole process will be swift and reliable.

REFERENCES

- <https://www.w3schools.com/>
- <https://www.javatpoint.com/>
- <https://www.tutorialspoint.com/php/index.htm>