INTERNSHIP REPORT
ON
Attendance Marking for Classroom

A Report submitted

By

Neelesh Nandan Srivastava
1501021134
CSE

Under the Guidance of
Shilpa Mahajani
Cognizant Tech. Solutions

In Partial fulfilment of the requirements for the Degree of

BACHELOR OF TECHNOLOGY

In

COMPUTER SCIENCE & ENGINEERING
DIT UNIVERSITY, DEHRADUN

(State Private University through State Legislature Act No. 10 of 2013 of Uttarakhand and approved by UGC)

Mussoorie Diversion Road, Dehradun, Uttarakhand248009, India

CANDIDATES DECLARATION

I hereby certify that the work, which is being presented in the project report,

Entitled “Attendance Marking for Classroom”, in partial fulfilment of the requirement for the award of the Degree of Bachelor of Technology and submitted to the university is an authentic record of our own work carried out during the period 19-Jan-2019 to 15-May-2019 under the supervision of Shilpa Mahajani.

Date: Signature of the Candidate

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Date: Signature of the Supervisor

ACKNOWLEDGEMENT

For the successful completion of this project, I'd extend a sincere thanks to our project guide Mrs. Shilpa Mahajani, who has been there with us while building the complete code from scratch. Without his guidance and teaching, it'd have been impossible of us to create the project.

I'm also grateful to our batch owners and people who've helped us out in every way possible Mohit Kariya Sir, Gerard Thomas Sir and Komal Sanjay Pawar Ma'am. Without them, internship at such a huge company would have not been completed successfully. They ensured our smooth functioning and handled all the quirks and doubts while the sessions which helped us a lot in order to calmly finish the project.

I'd also like to thank my college for giving us such an amazing opportunity to work through the college semester in order to get a corporate experience and education. It is only because of his thought that we were able to gain such a training with a parallel balance of college academics.

ABSTRACT

This report is aimed at documenting the “Attendance Marking System for Classroom” that has been developed as a solution of a common to mark attendance for a Classroom Session. While starting with the project we went through some similar existing platforms that inspired the project to be developed in the first place, however it provided the motivation to do it even better. The system we have created provides a common platform for logging in / signing up as the predefined user types that are as mentioned, the allocators and the nominees and thereafter surfing their corresponding dashboards in order to complete their tasks. Their dashboards comprise of windows for their respective functions that is easy to navigate and control since the main objective of the management system has been kept as the same.
Organization and employees should develop and progress simultaneously for the attainment of mutual goals. While this enablement’s can be provided by the Organization in multiple ways, the utilization/consumption of these becomes mandatory. All the more in the case where the enablement is Instructor Driven in an in-person mode.
This calls for an application that would automate the participation of an employee for any instructor led class room session/virtual session and will also provide a platform the Organization to notify the absentees, keep a tab of absenteeism and send feedback survey to rate the training experience.
The Attendance Marking for Classroom application is a solution developed to meet all the above mentioned requirements.

TABLE OF CONTENTS Page No

CHAPTER 1

INTRODUCTION

1.1 Purpose of this document

This document is aimed at:

- Providing the necessary inputs to the detailed requirements gathering phase and further on for the SDLC processes.

The purpose of this document is to systematically capture requirements for the project and the system to be developed. Functional requirements are captured in this document.

1.2 Project Overview

1.2.1 Objectives

Administrator

Below are the objectives of Administrator Module:

- Shall be able to Generate Report
- Shall be able to send feedback form
- Send Notification to Users marked absent
- Send form if any user found absent to fill the reason for being absent

Trainer

Below are the objectives of User Module:

- Can mark self as Present
- Able to fill feedback form if user present
- Receive notification and send response for being absent

CHAPTER 2

LITERARY SURVEY

2.1Methodology

➢ SDLC:

In software engineering, a software development process is the process of dividing software development work into distinct phases to improve design, product management, and project management. It is also known as a **software development life cycle**. The methodology may include the pre-definition of specific deliverables and artefacts that are created and completed by a project team to develop or maintain an application.

Most modern development processes can be vaguely described as **agile**. Other methodologies include *waterfall, prototyping, iterative and incremental development, spiral development, rapid application development, and extreme programming.*

Some people consider a life-cycle "model" a more general term for a category of methodologies and a software development "process" a more specific term to refer to a specific process chosen by a specific organization.

➢ Agile:

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

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

There are many agile methodologies, including:

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

➢ Client–server model:

Client–server model is a distributed application structure that partitions tasks or workloads between the providers of a resource or service, called servers, and service requesters, called clients.[1] Often clients and servers communicate over a computer network on separate hardware, but both client and server may reside in the same system. A server host runs one or more server programs which share their resources with clients. A client does not share any of its resources, but requests a server's content or service function. Clients therefore initiate communication sessions with servers which await incoming requests.

2.2Technology and Tools

- **Front End:**
  - **Java (HTML, CSS, JavaScript)**
    - **HTML:**

❖ **Hypertext Mark-up Language** (**HTML**) is the standard mark up for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript, it forms a triad of cornerstone technologies for the World Wide Web.

❖ Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

- **CSS:**

❖ **Cascading Style Sheets** (**CSS**) is a style sheet language used for describing the presentation of a document written in a mark-up language like HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

❖ CSS is designed to enable the separation of presentation and content, including layout, colours, and fonts.[3] This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file, and reduce complexity and repetition in the structural content.

- **JavaScript:**

❖ **JavaScript** often abbreviated as **JS**, is a high-level, interpreted programming language that conforms to the ECMAScript specification. It is a programming language that is characterized as dynamic, weakly typed, prototype-based and multi-paradigm.

❖ Alongside HTML and CSS, JavaScript is one of the core technologies of the World Wide Web. JavaScript enables interactive web pages and is an essential part of web applications. The vast majority of websites use it, and major web browsers have a dedicated JavaScript engine to execute it.

- **Middleware:**
  - **Java (Java Servlet, JDBC)**

- **Java Servlet:**

❖ A Java servlet processes or stores a Java class in Java EE that conforms to the Java Servlet API,a standard for implementing Java classes that respond to requests. Servlets could in principle communicate over any client–server protocol, but they are most often used with the HTTP.

❖ Thus "servlet" is often used as shorthand for "HTTP servlet". Thus, a software developer may use a servlet to add dynamic content to a web server using the Java platform. The generated content is commonly HTML, but may be other data such

as XML and more commonly, JSON. Servlets can maintain state in session variables across many server transactions by using HTTP cookies, or URL mapping.

- **JDBC:**

- **Java Database Connectivity** (**JDBC**) is an application programming interface (API) for the programming language Java, which defines how a client may access a database. It is a Java-based data access technology used for Java database connectivity. It is part of the Java Standard Edition platform, from Oracle Corporation. It provides methods to query and update data in a database, and is oriented towards relational databases. A JDBC-to-ODBC bridge enables connections to any ODBC-accessible data source in the Java virtual machine (JVM) host environment.

- **Backend:** *{can run on any database}*
  - **Oracle/SQL Server**

- **MySQL:**

- **MySQL** is an open source relational database management system (RDBMS). "SQL", is abbreviation for Structured Query Language.
- MySQL is free and open-source software under the terms of the GNU General Public License, and is also available under a variety of proprietary licenses. MySQL was owned and sponsored by the Swedish company MySQL AB, which was bought by Sun Microsystems (now Oracle Corporation).

CHAPTER 3

ANALYSIS

Software Requirements

- Operating System: Linux OS, Windows 7/8/10
- IDE: Eclipse IDE for Java EE Developers (Oxygen)
- Server: MySQL Workbench Server 6.2, Tomcat 8.5
- RDBMS: MySQL
- Environment: JDK 1.6, 1.7, 1.8 for Java 6, 7, 8 configured on the workstation

3.2 Hardware Requirements

- Processor: 1.7GHz Intel Core2Duo or above
- RAM: 4 GB
- Hard Disk: 100 GB-1 TB
- Network Adaptor

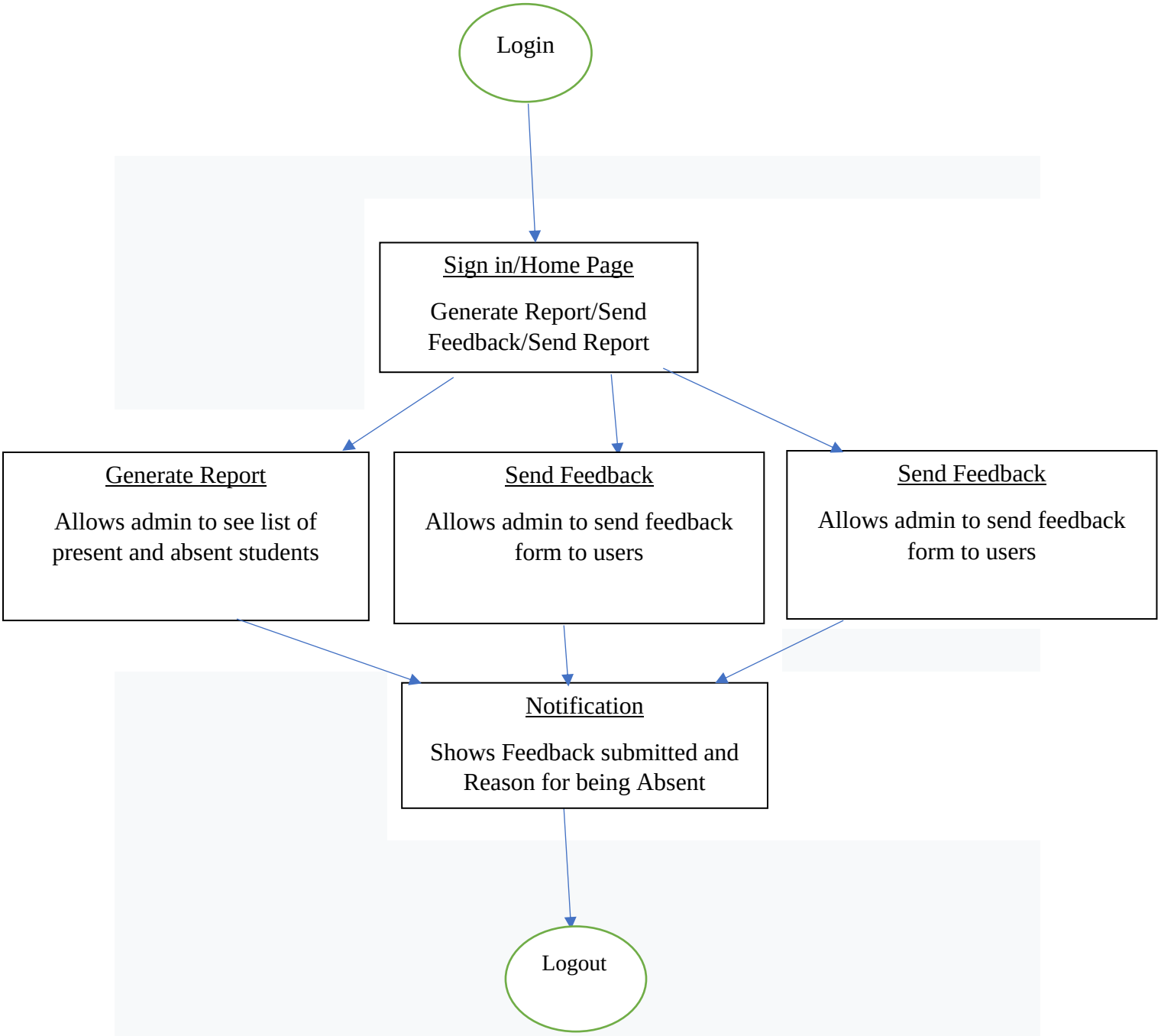
CHAPTER 4

DESIGN

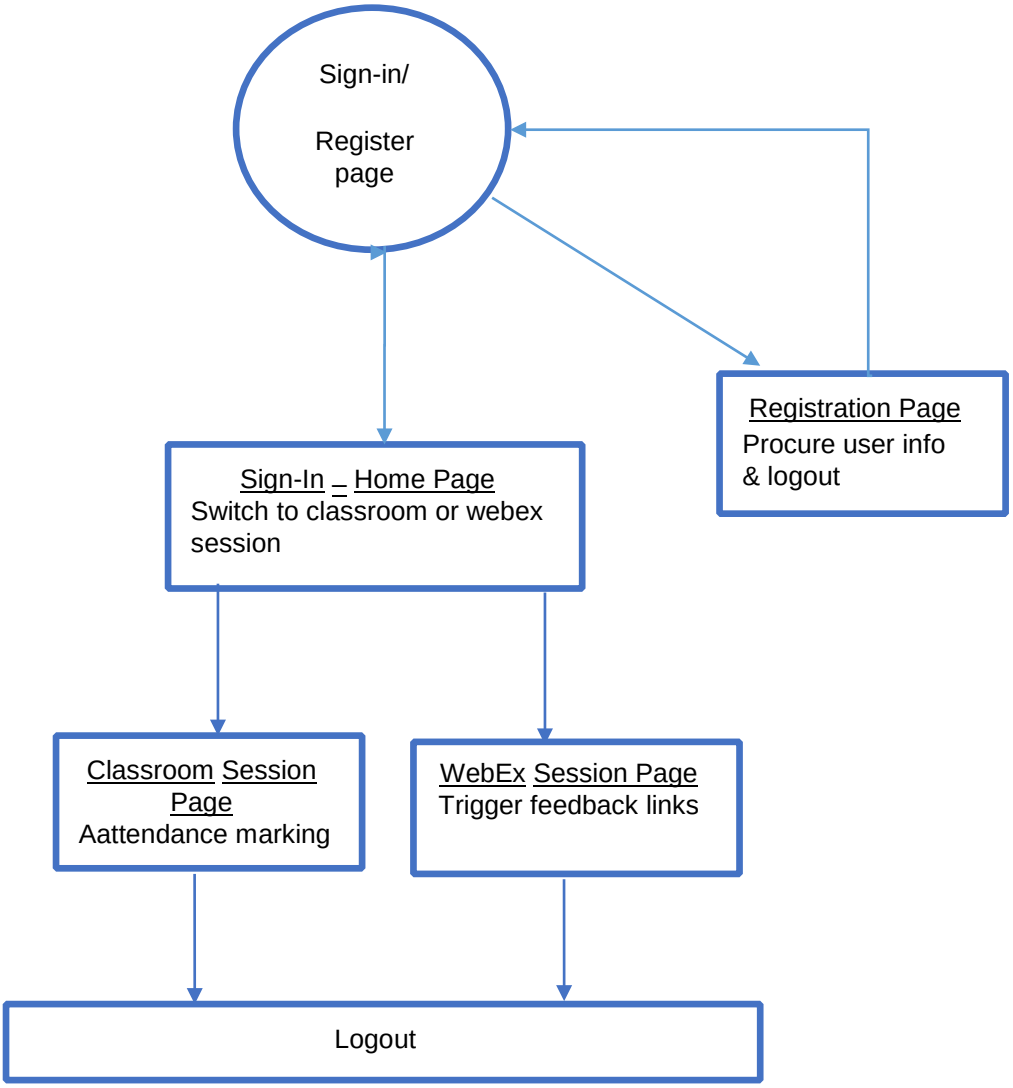
1. Design

4.1 Diagrams

ADMIN FLOW CHART

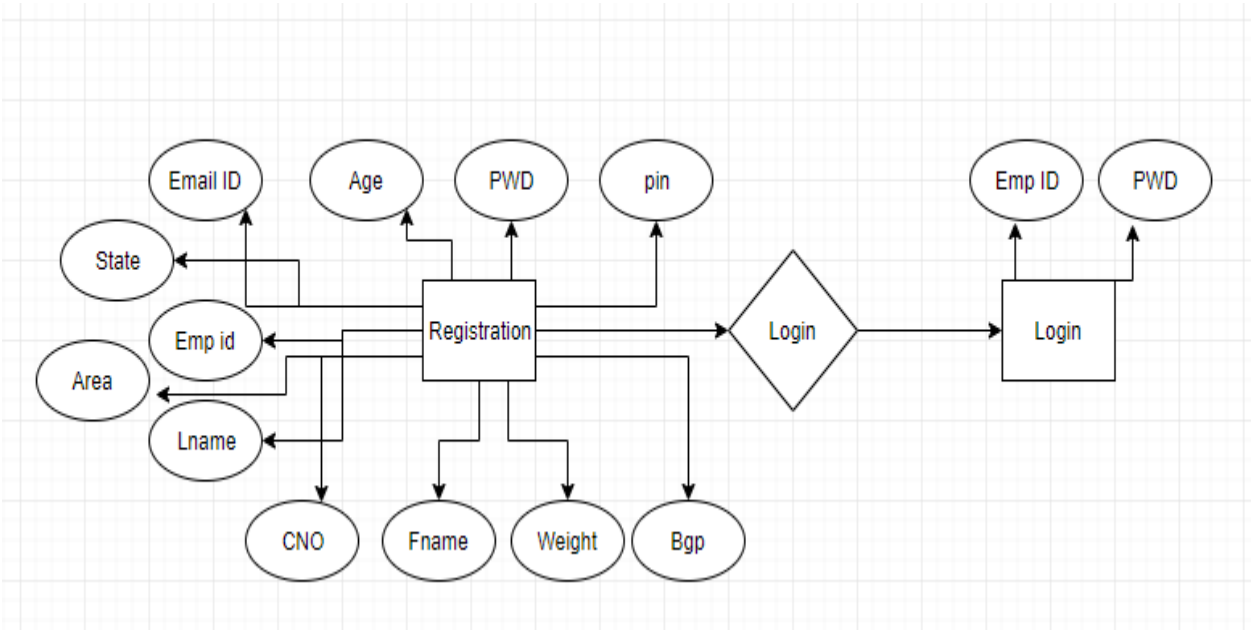


USERFLOW CHART



4.2 Data Model

The following is a schematic view of the database design



4.3 Tables

User Registration:

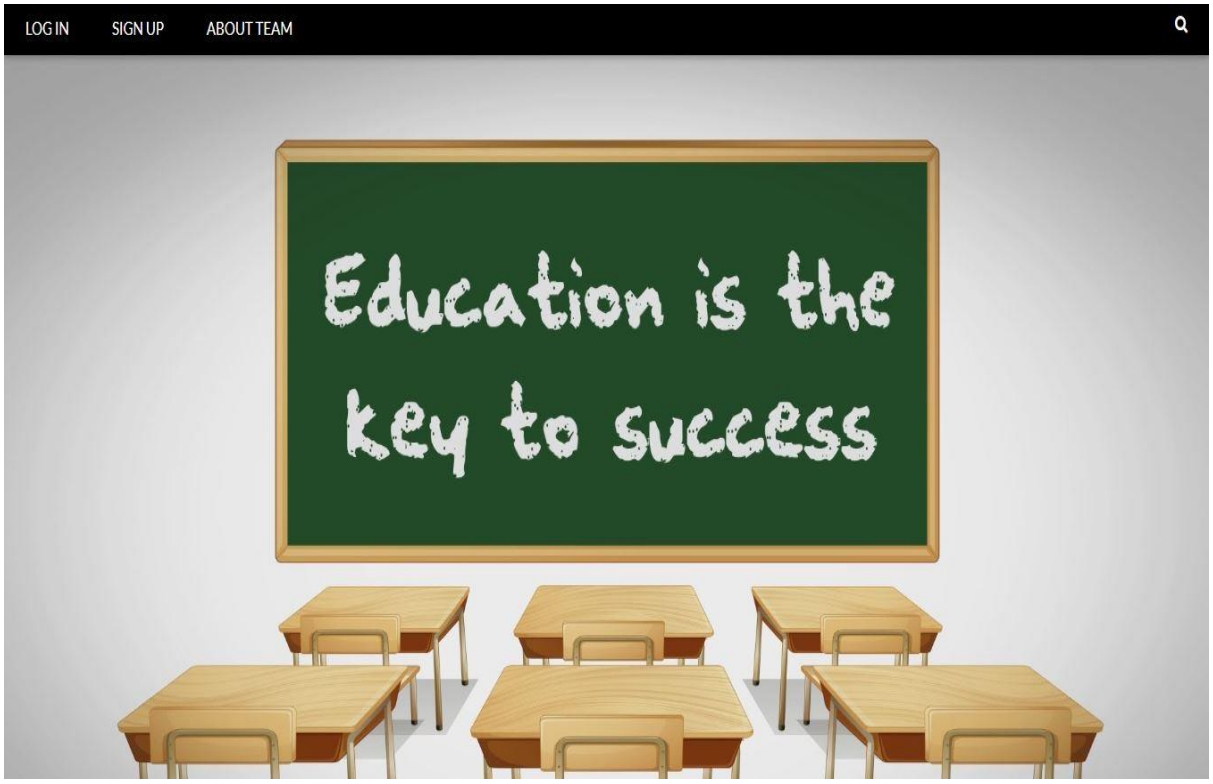
Column Name	Data Type	Length	Nulls
Login Id	nvarchar	20	N
Password	nvarchar	20	N
First Name	nvarchar	20	N
Last Name	nvarchar	20	N
Age	int	20	N
Gender	nvarchar	20	N
Contact Number	nvarchar	20	N
Email	nvarchar	20	N
Address	nvarchar	20	N
Zipcode	nvarchar	20	N
City	nvarchar	20	N
State	nvarchar	20	N
Emp Id	nvarchar	20	N

User login:

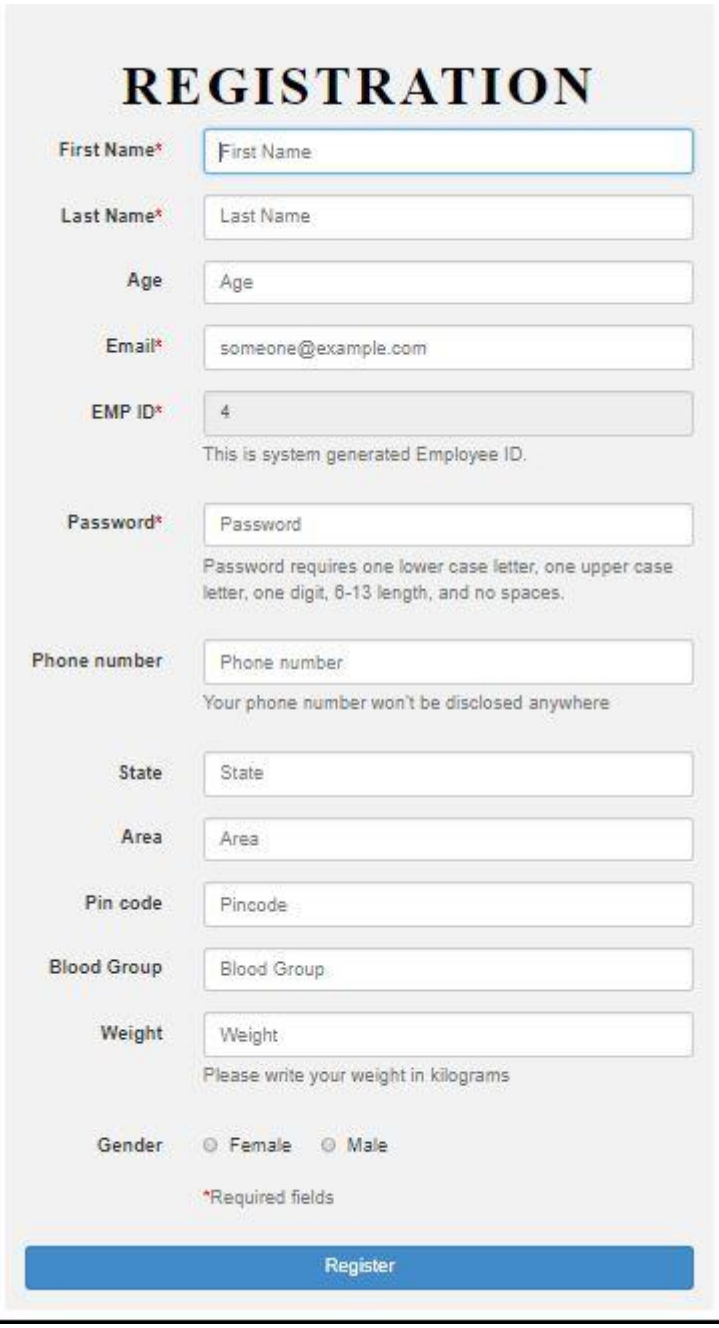
Column Name	Data Type	Length	Nulls
User Id	nvarchar	50	N
Password	nvarchar	50	N

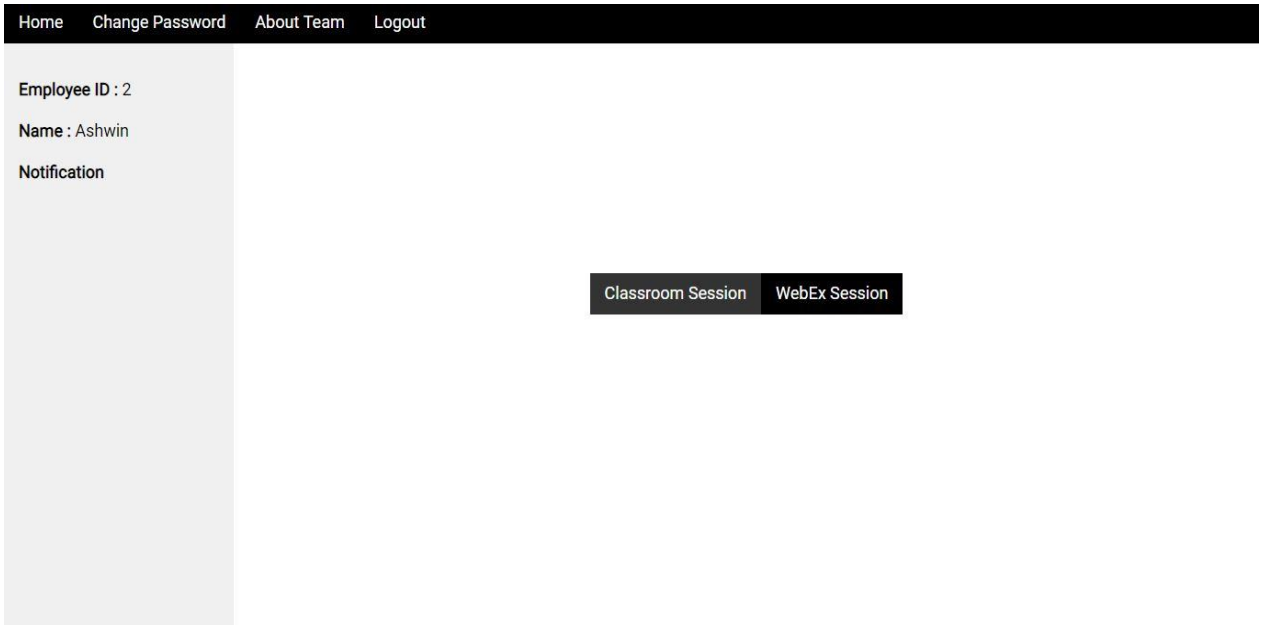
CHAPTER 5

UI DESIGN

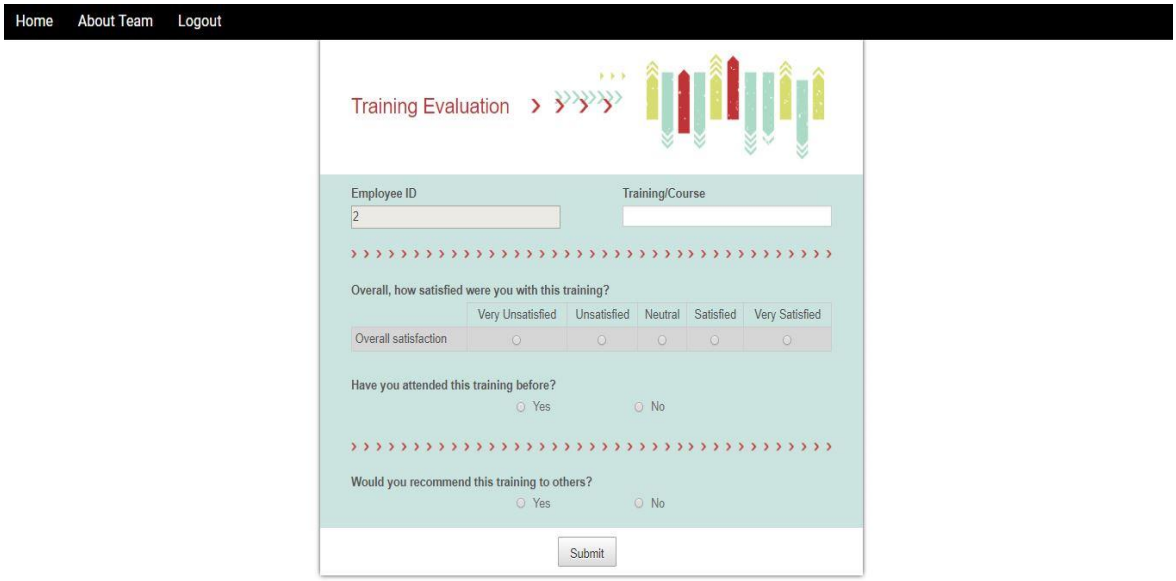


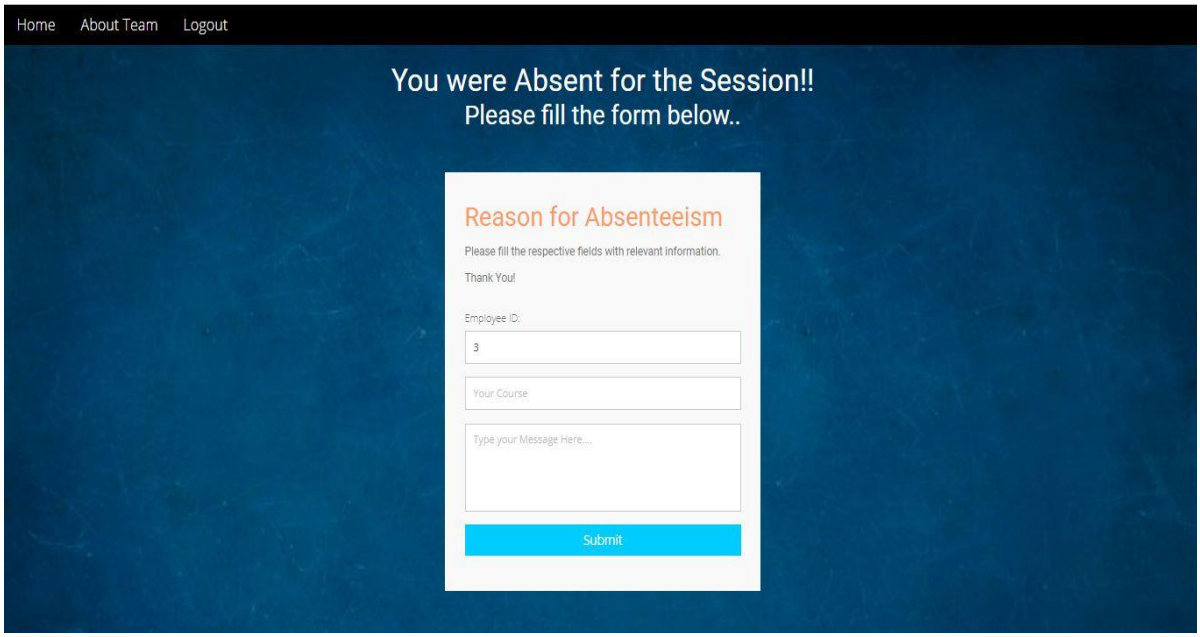
Login Form

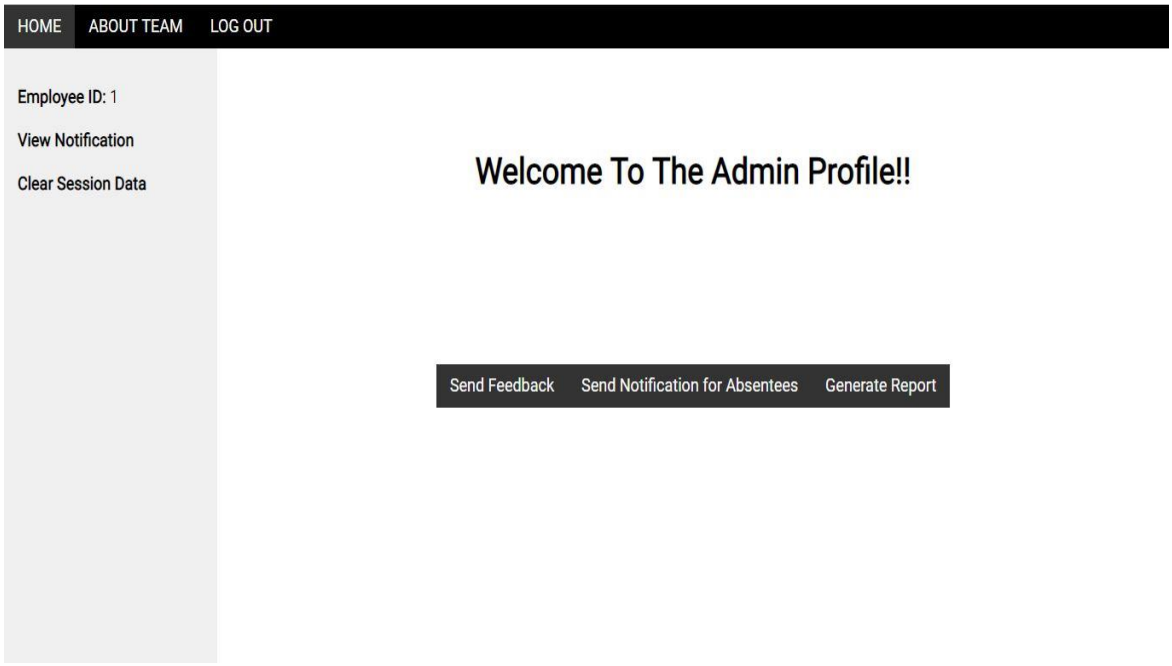

REGISTRATION
First Name*
First Name
Last Name*
Last Name
Age
Age
Email*
someone@example.com
EMP ID*
4
This is system generated Employee ID.
Password*
Password
Password requires one lower case letter, one upper case letter, one digit, 6-13 length, and no spaces.
Phone number
Phone number
Your phone number won't be disclosed anywhere
State
State
Area
Area
Pin code
Pincode
Blood Group
Blood Group
Weight
Weight
Please write your weight in kilograms
Gender
Female
Male
*Required fields
Register

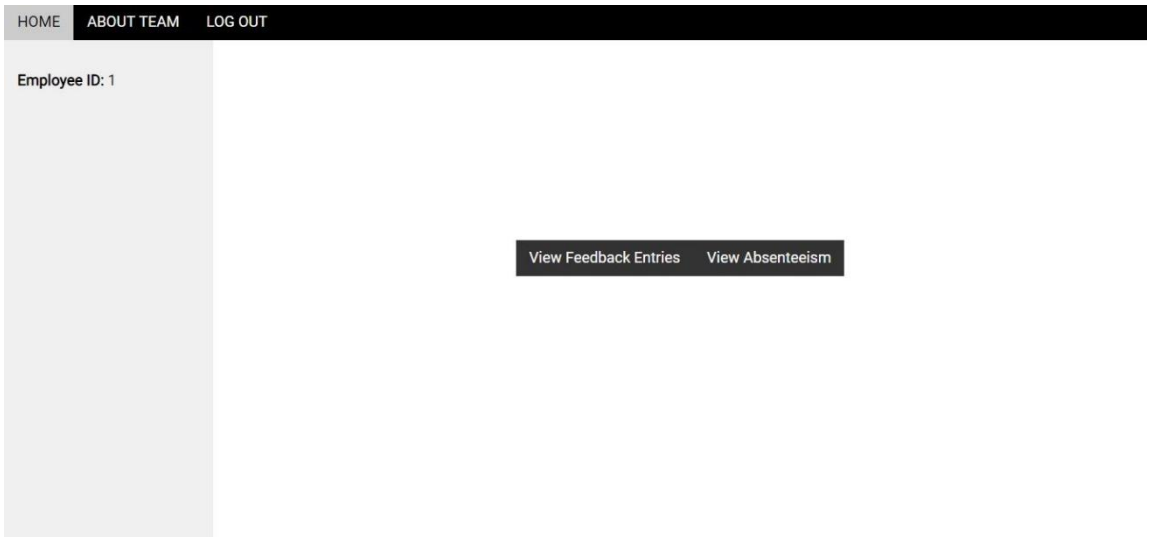

Home
Change Password
About Team
Logout
Employee ID : 2
Name : Ashwin
Notification
Classroom Session
WebEx Session

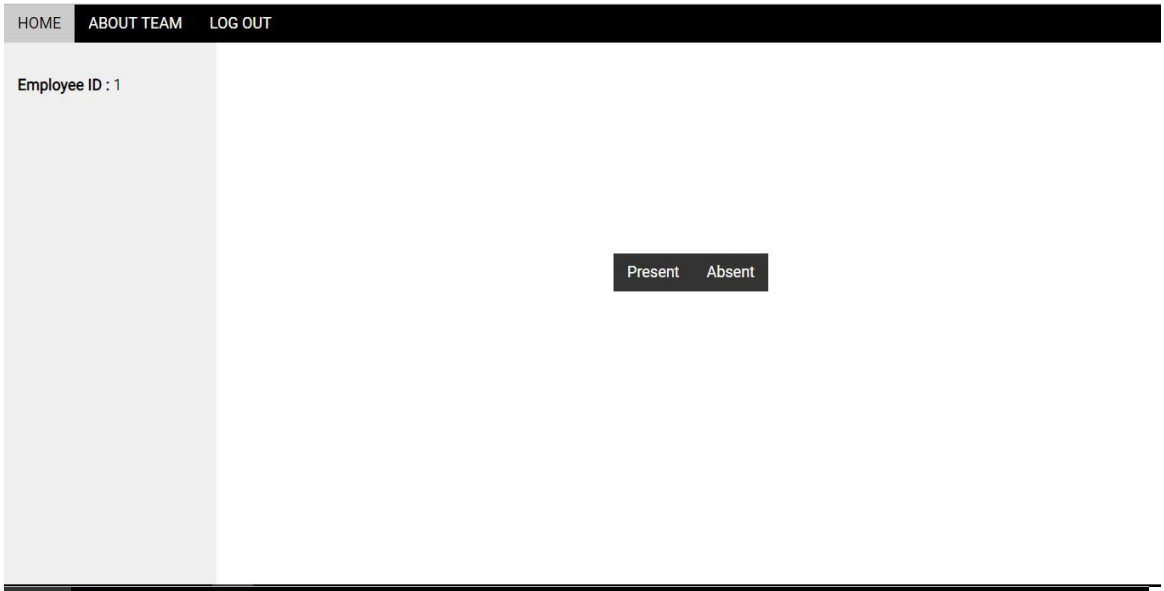

Home
About Team
Logout
Employee ID : 2
Name : Ashwin
Employee ID
2
Old Password
NewPassword
Confirm Password
Save

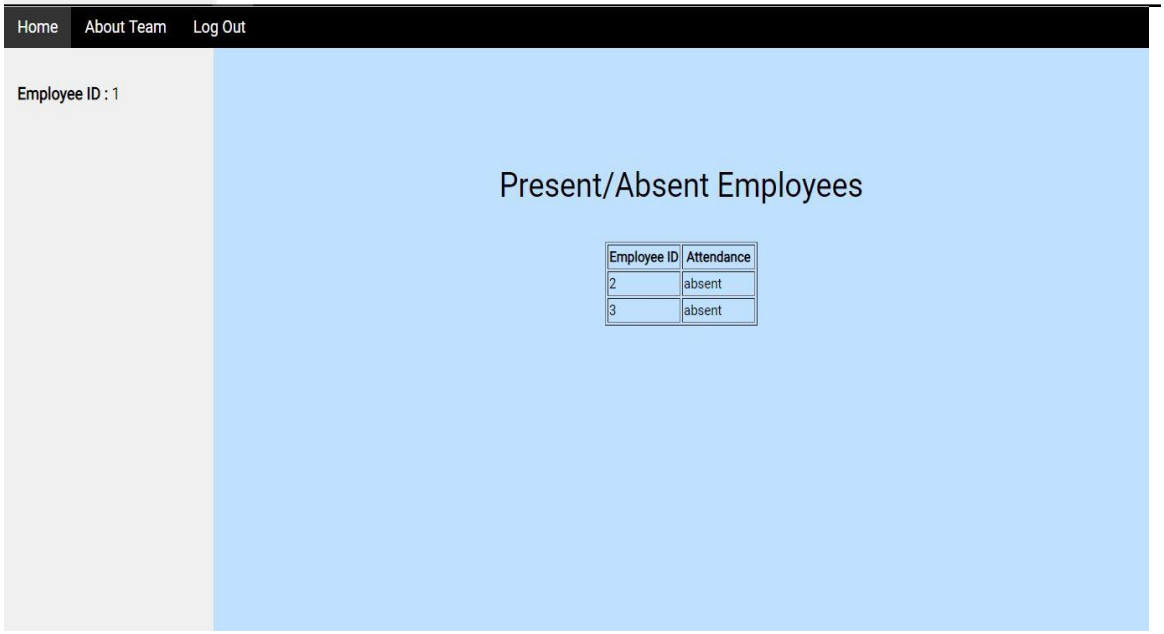

Home
About Team
Logout
Training Evaluation
Employee ID
2
Training/Course
Overall, how satisfied were you with this training?
Very Unsatisfied
Unsatisfied
Neutral
Satisfied
Very Satisfied
Overall satisfaction
Have you attended this training before?
Yes
No
Would you recommend this training to others?
Yes
No
Submit

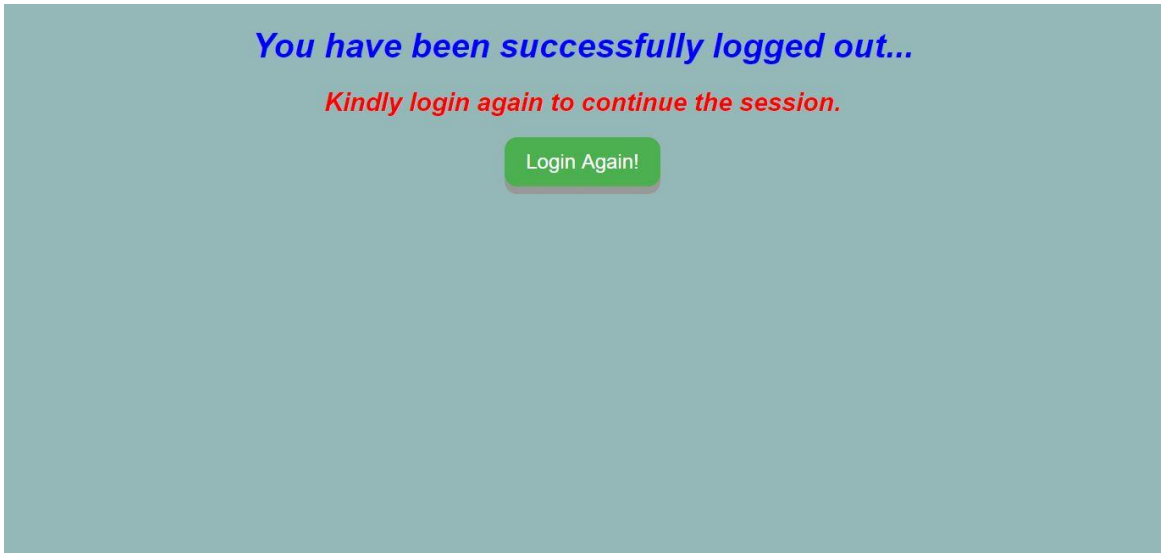

Home
About Team
Logout
You were Absent for the Session!!
Please fill the form below..
Reason for Absenteeism
Please fill the respective fields with relevant information.
Thank You!
Employee ID:
3
Your Course
Type your Message Here....
Submit


HOME
ABOUT TEAM
LOG OUT
Employee ID: 1
View Notification
Clear Session Data
Welcome To The Admin Profile!!
Send Feedback
Send Notification for Absentees
Generate Report


HOME
ABOUT TEAM
LOG OUT
Employee ID: 1
View Feedback Entries
View Absenteeism


HOME
ABOUT TEAM
LOG OUT
Employee ID : 1
Present
Absent


Home
About Team
Log Out
Employee ID : 1
Present/Absent Employees
Employee ID
Attendance
2
absent
3
absent


You have been successfully logged out...
Kindly login again to continue the session.
Login Again!

Chapter 6

CONCLUSION

6.Conclusion

The Attendance Marking System for Classroom system guided us through the proper architecture of a management system, making us learn the structured levels of development. Being new to the software, a little problem was faced while writing the complete code from scratch however learning the new technologies in order to build the project has levelled up the making process of management system. As a limitation of project, there could be a few more functionalities added to enhance the system and similarly a better architecture can be used to make it smoother. But whatever is made, it has surely cleared our basics and taught us a lot. Concluding to it, we look forward to enhance the features of the system as well as expanding the possible opportunities that come its way.

REFERENCES

- w3schools.com
- docs.oracle.com
- stackoverflow.com
- css-tricks.com
- www.techonthenet.com
- www.tutorialspoint.com
- beginnersbook.com