Software Requirements Specification

for

Employee Management System

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5th Dec-2022

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1. Introduction

1.1 Purpose

This document explain the working of our employee management system from background to its implementation. How the requirements were met and the core features of the application

1.2 Document Conventions

Font Style: Calibiri

Font Size:12

Font decoration: none

1.3 Intended Audience and Reading Suggestions

The document is intended to course instructors or any other person who is connected to this field or finds the project relevant to its needs.

1.4 Product Scope

The employee management system is designed to make it easier for both admin and employee to handle all the operations at one place on one click of a button. The goal is to provide ease to employees in managing their schedule, attendance, training and other things more conveniently so they can concentrate more on their work.

References

(https://web.cs.dal.ca/~hawkey/3130/srs_template-ieee.doc)

1.5 Product Perspective

Many offices already have employee management systems but they are more intended to be helpful for administration but not the employees working in the office. They have to separately make their schedules for meetings etc. but with our software, they have one platform to handle all these at one place which makes them to not worry about other things but only on their job.

1.6 Product Functions

Admin will be able to:

- Add new employees
- Update Info
- Add new departments
- Check Attendance of all or specific employee
- Approve leaves
- Schedule meetings/trainings

Employee will be able to:

- Check-in to mark attendance

- Update password and personal info
- Check Schedules meetings and training sessions
- Apply for leave
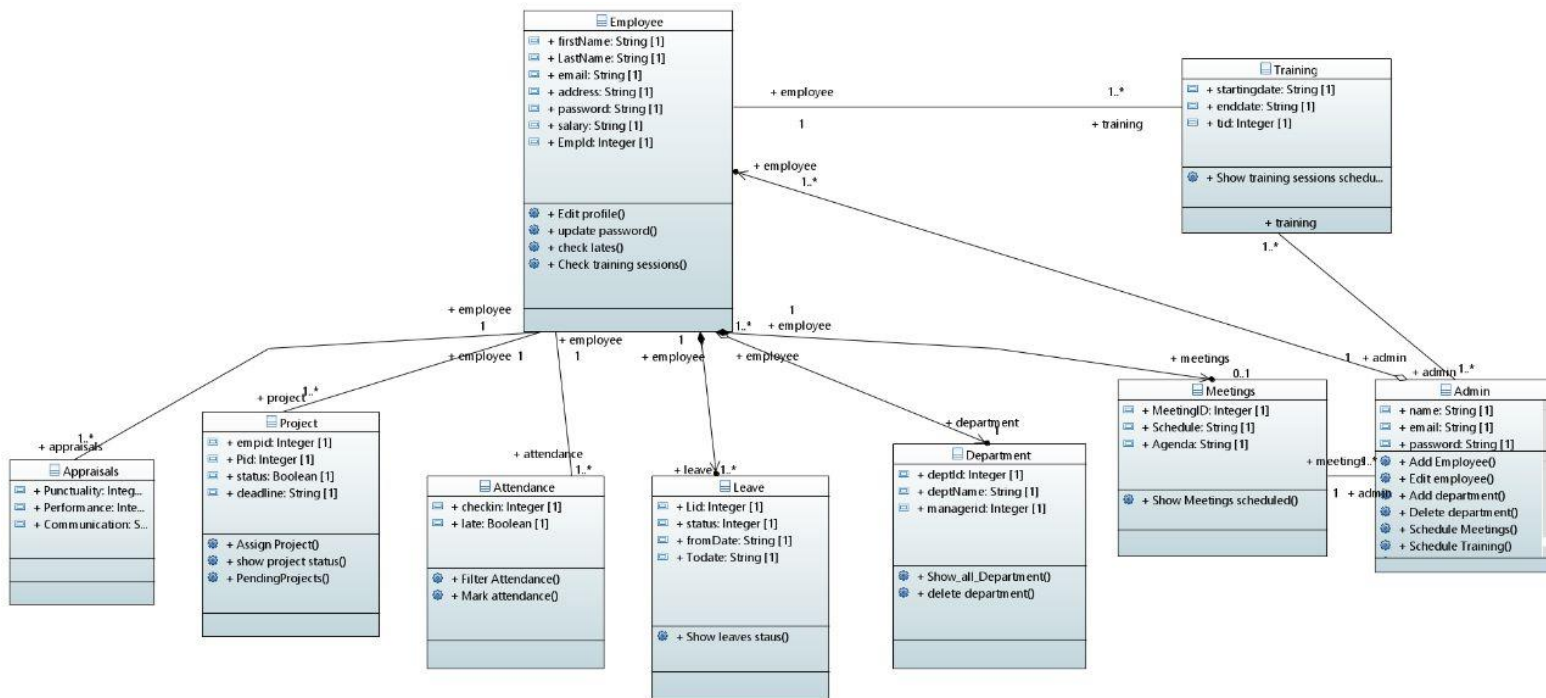
1.7 User Classes and Characteristics

Most frequently, the employee will be using this system. They can manage their attendance, meetings and other things on daily basis. Adin will be 2nd most frequent user. It would be adding new employees and departments and approve leaves of the employees.

1.8 Operating Environment

The system is made on a php framework Laravel which follows MVC design pattern.

the application logic, or controller, is separated from the technology used to display information to the user, or the view layer. The model is a communications vehicle between the controller and view layers.

We also need xampp to have local host to run this project

Applications:

- **Visual studio code**
- **Xampp**
- **Php my admin on local host for Mysql**

1.9 Design and Implementation Constraints

One constraint is that we have used php as backend and html, css, bootstrap for frontend hence its not a single page application i.e every time a form is filled or a button is clicked, the page will reload to display changes. Due to corporate policies, we are not able to access data of higher level management like CEO hence they are not included in employees or cannot be managed.

1.10 User Documentation

User manual will be provided to both Admin and employees separately so they do not face issues while using the software first time.

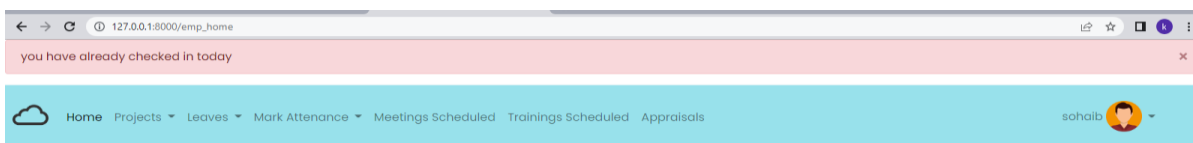## 1.11 Assumptions and Dependencies

- If a department is deleted, then all employees in that department would also be deleted.
- A person could be in department X, but could be manager of department Y.

2. External Interface Requirements

2.1 User Interfaces

- Error messages will be displayed as an alert of bootstrap on top of the screen

- All the forms have validation and error is shown on submit

Attendance

Search Employee First Name `Atleast 2 characters` The emp id field is required. From: `dd/mm/yyyy` ☐ The from field is required. To: `dd/mm/yyyy` ☐ The to field is required. [Search]

Employee ID	Employee Name	Checkin	Late
24	sohaib ashraf	2022-12-04 12:06:25	Late
24	sohaib ashraf	2022-12-03 10:41:16	Late

- The display standard is red alert for error and green alert for success
- All tables, forms, their designs and the color theme is same (standard) throughout the website.

2.2 Hardware Interfaces

The system is perfectly supported by any computer or laptop. It is also mobile /tablet responsive but cannot be supported on mobiles as its not been deployed as of now.

Type of data been taken from the user is: login credentials(hashed passwords),personal information, appraisals, meetings and raining schedules and saving the information for further searching/filtering of data.

2.3 Software Interfaces

Operating system:Windows10

Database Mysql (Php myadmin)

Webserver:Xampp

Web echnologies: Xampp, Laravel, hml, css bootstrap

Ide: Visual studio code

2.4 Communications Interfaces

- User email for signup should be valid

- Password from user is hashed and must be matched by hashed password in database.
- Dates range in filtering data should be valid
- No encryption issues

3. System Features

3.1 Register new employee

4.1.1 Description and Priority

It is the highest priority features of admin. Admin will add core details like name, employee id, salary and assign email and a password to employee so the new employee can have access to the system.

4.1.2 Stimulus/Response Sequences

In the admin dashboard, admin will click on add new employee and system will respond by giving him the add new employee form to submit.

4.1.3 Functional Requirements

EQ-1: The user must be a logged in admin
REQ-2: The submitted data is validated and error is shown n the form incase the data is wrong

3.2 Schedule Meetings and Training sessions

4.1.1 Description and Priority

It is a high priority features of admin. Admin will schedule meetings and training sessions of employees with all the details and timings and employees can access their schedule meeting

4.1.2 Stimulus/Response Sequences

In the admin dashboard, admin will click on schedule meetings or schedule trainings and fill up details to schedule tem

4.1.3 Functional Requirements

EQ-1: The user must be a logged in admin
REQ-2: The submitted data is validated and error is shown in the form in case the data is wrong

3.3 Approve Leaves

4.1.1 Description and Priority

It is a medium priority features of admin. Admin can approve leaves of employees

4.1.2 Stimulus/Response Sequences

In the admin dashboard, admin will click on Approve leaves and he will have access to leave requests of employees in order of who is asking for a leave on which date in ascending order.

4.1.3 Functional Requirements

EQ-1: The user must be a logged in admin
REQ-2: The leave must be requested by an existing employee

3.4 Mark Attendance

4.1.1 Description and Priority

It is a high priority features of employee. Employees can login once daily.

4.1.2 Stimulus/Response Sequences

In the employee navbar, employee can click on mark attendance and then click on submit. If employee is late, He will get an alert on top that he is late today.

4.1.3 Functional Requirements

EQ-1: The user must be a logged in employee
REQ-2: Can only use this feature once daily

3.5 Assign Project

4.1.1 Description and Priority

It is a high priority features of employee. If employee is also a manager, he can assign projects only to employees of his department

4.1.2 Stimulus/Response Sequences

In the employee navbar, employee can click on assign project and then choose the employee and project details and deadline.

4.1.3 Functional Requirements

EQ-1: The user must be a logged in employee
REQ-2: The employee must be a manager of a department

3.6 Give Appraisal

4.1.1   Description and Priority

It is a medium priority features of employee. If employee is also a manager, he can give appraisal to employees of his department

4.1.2   Stimulus/Response Sequences

In the employee navbar, employee can click on Give Appraisal and then choose the employee ad give him review/appraisal,

4.1.3   Functional Requirements

EQ-1: The user must be a logged in employee
REQ-2: The employee must be a manager of a department

4. Other Nonfunctional Requirements

4.1 Performance Requirements

Performance wise, our app is built to be very responsive and fast. Transitions between the interfaces takes very minute time . The system is also storage friendly as it hardly takes around 29 MBS.
The system is absolutely safe as we are using hashed passwords to save data. Onl admin can access the admin dashboard

4.2 Safety Requirements

The system is very safe as we are using hashed passwords to save data. Only thing user should take care is the entry of fake/dummy data. Dummy data must be deleted from database.

4.3 Security Requirements

External users must not be given access to admin dashboard. Our login system ensures this.

The data of user stays safe and untouchable. So privacy is maintained.

4.4 Business Rules

Only a manager can assign projects to only the employees working in his department.

Only admin can check number of employees in each department.