

Daffodil International University

Department of Software Engineering, FSIT

SWE-431 Project / Thesis

Project Documentation

Employee Management System

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Approval

This Project titled "Employees Management System", submitted by Shukriti Ranjan Das (161-35-1457) to the Department of Software Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Software Engineering and approved as to its style and content.

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DECLARATION

I hereby declare that, this project has been done by me under the supervisor of **Ms. Syeda Sumbul Hossain**, Senior Lecturer,

Department of Software Engineering, Daffodil International University. I also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree of Bsc.

.....

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Acknowledgement

First of all I would like to thank almighty God for giving me the proper time to successfully complete the project. Then I want to thank our respectable supervisor "Ms. Syeda Sumbul Hossain" Faculty of software Engineering, Daffodil International University, Dhaka for her excellent guidance and for having trust in my capability to complete this project.

I want to express our heartiest gratitude to Head, Department of swe, for encouraging me and providing me with such an opportunity.

I am grateful to my parents as well as family members for their understanding, encouragement and endless support throughout the duration of my studies. I would like to extend my best wishes to all the teachers, friends and stuff member of our department.

Abstract

This project is a web based application called Employees Management System. This project is for those companies who are facing these problems such as take daily attendance system, attendance report submission, equipment cost report, daily work report, salary report, extra bills report of company and monthly closing report end of the month. Basically this web application is for them. Any companies can use this application for save their time and hard work.

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Chapter 01: Introduction

1.1 Introduction

This section gives an overview of everything included in this project and discusses some of the benefits.

1.2 Purpose

Through this document, the project "**Employees management System**" will get a good idea. This document is main purpose is given a good idea for user and their work. This document will highlight the benefits of the project. This document will discuss the requirements, design, implementation and testing. Many companies will be benefited if they use this web application.

1.3 Project Overview

In this time technology in updated day by day and various uses technology for their own advantage. This digital era our data is increasing. And we use technology to control these data. In my web application I am used some technology for use user friendly. Employees, admin and owner of the companies can use it easily.

Here will be three type user and all of them should use their own panel by login. Ceo can add admin and admin will add employee of their office. Then employees finish their work by using this application and also report submit to admin /ceo. Admin submit their work report to ceo.

1.4 Problem Statement

Our work is increasing day by day in everywhere. Many companies and organizations are the same position. Now a days some companies are facing these common problem to maintain their official work such as take daily attendance with submit report, salary report, employees work details, extra bills and monthly closing report etc. If any companies or organizations do their work manually So I think they are wasting a lot of their valuable time. They need to use this application.

1.5 Goals

The main goals of this project are to the web-based application. Most people/organizations are now dependent on online, but many companies/organization do their work manually yet. My web application is for those companies who are facing above problems. I think if they are use this web application then they can do their work easily. This will benefit them a lot and they will be able to save their valuable time. And the country will move towards improvement.

1.6 Project Scope

Through this system, employees of the companies can easily finish their daily work and then submit to admin to ceo. And it also can save their valuable time. Later they will be able to use this time for another work

1.7 Stakeholders

There are three types of stakeholders in "Employees Management System". Such as:

- CEO
- Admin
- Employees

Brief descriptions about stakeholders are given below.

Employees: At first when an employee joins the workplace then the admin will register them and provided their user id no. After that employee can start his work such as daily work report, equipment cost report, monthly closing report and submit to admins.

Admin: Admin will registered and get user id by CEO. Then admin can their works start. In this case admin will make employees list, take daily attendance employees salary report and send it to ceo. Admin also check employees daily work report, equipment cost report, monthly closing report and submit to ceo.

CEO: Ceo can register admin and employees . And he can access every report which are provided by employees and admins .

1.8 Project Schedule

Table 1.8: Project schedule

Activities	Duration (in week)	Total week
Brainstorming	Week-1, Week-2	2
Problem identification	Week-3, Week-4	2
Requirement analysis	Week-5	1
Sketching	Week-6	1
Design specification	Week-7, Week-8	2
Database design	Week-9	1
Implementation	Week-10, Week-11, Week12, Week13	4
Testing	Week-14, Week-15	2
Delivery	Week-16	1

1.9 Release Plan

The release plan is given below:

Table 1.9: Release plan

Version	Feature	Date
V0.1	System design, Multiple login Admin add employees to the system.	10-10-2019
V0.2	Employees starts to make daily work report, Equipment cost report and monthly closing report	01-11-2019
V0.3	ceo add admin, admins make daily attendance report, salary report and read reports which are submitted by employees, ceo can access all report provided by all.	14-12-2019

Chapter 2: System Analysis

2.1 Requirement Analysis

Requirement analysis is a process of help user needs for application. Requirement analysis involves the task that decides the needs of the software, which mainly incorporates objections and requirements of different customer. Requirement analysis needs to the good quality of the application.

2.2 Requirement Gathering

There are many strategies for collecting requirement gathering, such as brainstorming, questionnaires, interview and customer observation.

I first meet the supervisor and made a list of the requirement. I've talked about my project with different users and I've got work from them.

2.3 Feature

- Password protected login system.
- At first only ceo can login and then update his profile.
- Ceo can add admin and employee both.
- Then admin can login and update his profile and only add employees.
- Employee login with provided email and password and update his profile.
- Employee will make daily work report.
- Employee will make equipment cost report.
- Employee will make monthly closing report.
- Admin can check employees work report.
- Admin will make daily attendance report.
- Admin will make salary report.
- Admin will make monthly extra bills report.
- Ceo check all report which are submitted by employees and admin.
- Password forget with email verification.

2.4 Requirement Specification

2.4.1 Functional Requirement

Functional requirements are mandatory for the any system. For this system functional requirements are mentioned below.

ID: FRQ-01

Requirement Name: Login Ceo.

Description: At first only ceo can login with valid email and password.

Stockholders: Ceo only.

Table 2.5.1.2: Add admin & employee

ID:	FRQ	-02

Requirement Name: Add admin & employee.

Description: Only ceo can add admin and employee both. Admin can add employee only

Stockholders: Ceo, Admin

Table 2.5.1.3: User login

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Requirement Name: User login.

Description: Now every user can login with valid email and password

Stockholders: Ceo, Admin, Employees

Table 2.5.1.4: Ceo can edit reports

ID: FRQ-11

Requirement Name: Ceo can edit report

Description: Only ceo can edit all reports provided by employees and admins.

Stockholders: Ceo

Table 2.5.1.5: Ceo can delete reports

ID: FRQ-1

Requirement Name: Ceo can delete reports.

Description: Only ceo can delete all reports

Stockholders: Ceo

Table 2.5.1.6: User logout

ID: FRQ-2

Requirement Name: User logout.

Description: All user will logout after finish their work.

Stockholders: Ceo, Admins, Employees

Table 2.5.1.7: Recovery password

ID: FRQ-2

Requirement Name: Recovery password

Description: All user can recover their password by email varification

Stockholders: Ceo, Admins, Employees

2.5.2 Non-Functional Requirement

For this system non-functional requirements are mentioned below.

Table 2.5.2.1: Make daily work report

ID: FRQ-04

Requirement Name: Make daily work report

Description: Employee will make a daily work report

Stockholders: Employees

Table 2.5.2.2: Make Equipment cost report

Requirement Name: Make equipment cost report

Description: Employee will make equipment cost report

Stockholders: Employees

Table 2.5.2.3: Monthly closing report

ID: FRQ-06

Requirement Name: Monthly closing report.

Description: Certain employee will make monthly closing report.

Stockholders: Employees

Table 2.5.2.4: Admin make daily attendance report

ID.	EDO	Ω
ID:	FRO-	·()/

Requirement Name: Admin make daily attendance report

Description: Only admin can make daily attendance report

Stockholders: Admin

Table 2.5.2.5: Admin make salary report

ID:	FRÇ	-08
11.	1110	, ,,

Requirement Name: Admin make salary report

Description: Admin can make salary report only and submit.

Stockholders: Admin

Table 2.5.2.6: Check report which are employee submitted

ID: FRQ-09

Requirement Name: Check report which are employee submitted

Description: Ceo and admin can check all report which are submitted by Employees

Stockholders: Ceo, Admin

Table 2.5.2.7: Check report which are admin submitted

ID: FRQ-10

Requirement Name: Check report which are admin submitted

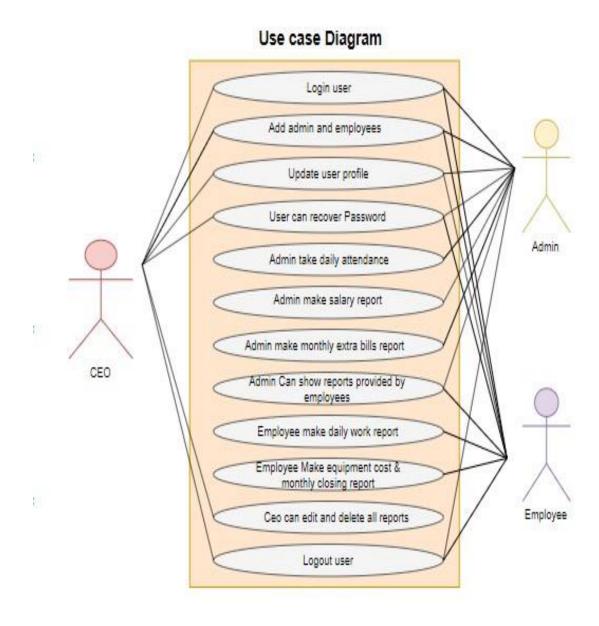
Description: Ceo can check all report which are submitted by admin

Stockholders: Ceo

2.6 Use case of proposed system

2.6.1 Use-case Diagram

Figure 2.6.1: Use-case diagram



2.6.2 Use-Case Description table

Table 2.6.2.1: Login User

Use Case Title	Login user
Use Case ID	Uc-1.0

Preconditions	At first only ceo can login after that ceo add admin and
	employees then can login.
Actors	CEO, Admin, Employee
Success End Condition	User successfully login.
Failure End Condition	If error, then it redirects to login page again.
Trigger	Show users separate index panel
Description	After successfully login users can access his own panel and then he can start his work.

Table 2.6.2.2: Add admin and employees

Use Case Title	Add admin and employees
Use Case ID	Uc-2.0
Preconditions	Only ceo can add admin and employees and admin can add employees only
Actors	CEO, Admin.
Success End Condition	Ceo and admin should success to add admin and employees
Failure End Condition	Ceo or admin can't add admin and employees for any problems.
Trigger	Ceo can add employees or admin and admin can add employees after login his own panel.
Description	Ceo and admin after login his own panel they will get a option called add then they can register admin or employees by fill up required information.

Table 2.6.2.3: Update profile

Use Case Title	Update profile
Use Case ID	Uc-2.0

Preconditions	Users cannot access without login
Actors	CEO, Admin, Employee
Success End Condition	After login user can update his profile.
Failure End Condition	After fill up all information then press save button either not save.
Trigger	User update his profile by only login.
Description	After the user login then user can see many options then need to click profile and then user can update his profile by fill up required information.

Table 2.6.2.4: User can recover password

Use Case Title	User can recover password
Use Case ID	Uc-3.0
Preconditions	User must have registered by ceo or admin.
Actors	CEO, Admin, Employee
Success End Condition	User successfully recover his password
Failure End Condition	User cannot recover his password.
Trigger	Every user can recover his password by using his email.
Description	If user input his valid email id then he got a link and then user can recover his password by click this link.

Table 2.6.2.5: Admin take daily attendance

Use Case Title	Admin take daily attendance

Use Case ID	Uc-4.0
Preconditions	Admin must be login first.
Actors	Admin
Success End Condition	Admin taken daily attendance successfully
Failure End Condition	Admin will have failed to take daily attendance.
Trigger	After taken daily attendance user save it to database.
Description	Only Admin can take daily attendance by fill up required information and must click to save button.

Table 2.6.2.6: Admin make salary report

Use Case Title	Admin make salary report.
Use Case ID	Uc-6.0
Preconditions	1. admin must be login.
	2. Admin make salary report by click salary option.
Actors	Admin
Success End Condition	Admin make salary report successfully.
Failure End Condition	Admin have failed to make salary report.
Trigger	Only admin can make salary report by fill up all input field.
Description	After make salary report admin save it to database and this salary report can access only ceo.

Table 2.6.2.7: Admin makes monthly extra bill report.

Use Case Title	Admin make monthly extra bills report.
Use Case ID	Uc-7.0

Preconditions	1. Admin must be login.
	2. Admin select monthly extra bills report.
Actors	Admin
Success End Condition	Admin should success to make extra bills report.
Failure End Condition	Admin will have failed to make extra bills report.
Trigger	Admin will make an extra bills report
Description	Admin fill up all required field and save it to database by
	clicking save button.

Table 2.6.2.8: Admin can see all reports provided by employees

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Use Case Title	Admin can see all reports provided by employees
Use Case ID	Uc-8.0
Preconditions	1. Admin must be login.
	2. Admin select show reports option.
Actors	Admin
Success End Condition	Admin view all reports provided by employees.
Failure End Condition	Admin not view all reports provided by employees.
Trigger	View all reports which is employee provided
Description	Admin is able to can see all reports which is employee submitted .

Table 2.6.2.9: Employees makes daily work report

Use Case Title	Employee makes daily work report
Use Case ID	Uc-9.0

Preconditions	1. Employee must be login.
	2. Employee select daily work option.
Actors	Employee
Success End Condition	Employee is successful to make daily work report
Failure End Condition	Employee is failed to make daily work report
Trigger	Display successful daily work report.
Description	Employee can make multiple daily work report but is not
	same date.

Table 2.6.2.10: make equipment cost and monthly closing report

Use Case Title	Make equipment cost and monthly closing report
Use Case ID	Uc-10.0
Preconditions	Employee must be login
Actors	Employee
Success End Condition	Employee can able to success those report
Failure End Condition	Employee is failed to make those report
Trigger	View Equipment coat and monthly closing report.
Description	Employee save it to database after complete reports ,admin can only view and ceo can edit and delete all data.

Table 2.6.2.11: Ceo can edit and delete all reports

Use Case Title	Ceo can edit and delete all reports
Use Case ID	Uc-11.0
Preconditions	Only ceo can do this
Actors	Ceo

Success End Condition	Ceo is success to access all reports
Failure End Condition	Not show result.
Trigger	Ceo can view and edit all reports
Description	Ceo select an option which is he want to access then he can edit and delete all reports.

Table 2.6.2.12: Logout user

Use Case Title	Logout user
Use Case ID	Uc-12.0
Preconditions	1. users must be login.
	2. Users select the logout option.
Actors	CEO, Admin, Employees.
Success End Condition	Successfully logout.
Failure End Condition	Failed to logout
Trigger	All users can logout on his own panel.
Description	Users can logout by selecting logout option and then will go
	to home page.

Chapter 3: System Design

3.1.1 Activity Diagram

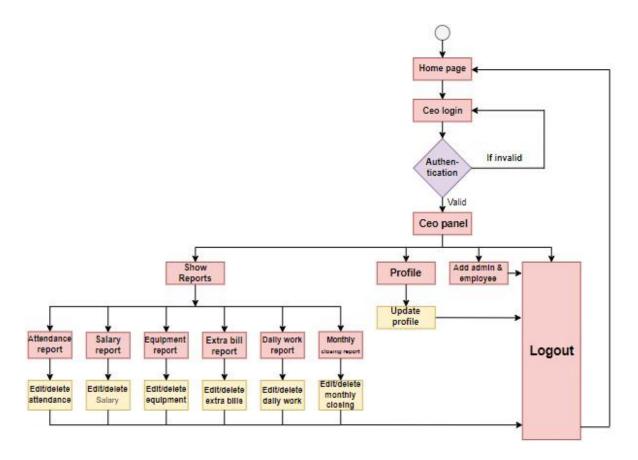


Figure 3.1.1: Activity Diagram for Ceo.

3.1.2 Activity Diagram

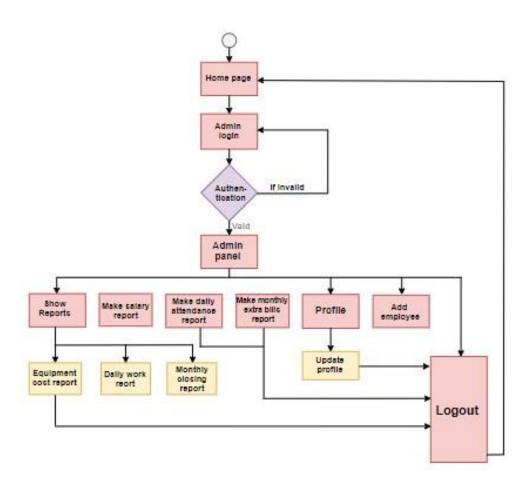


Figure 3.1.2: Activity Diagram for Admin

3.1.3 Activity Diagram

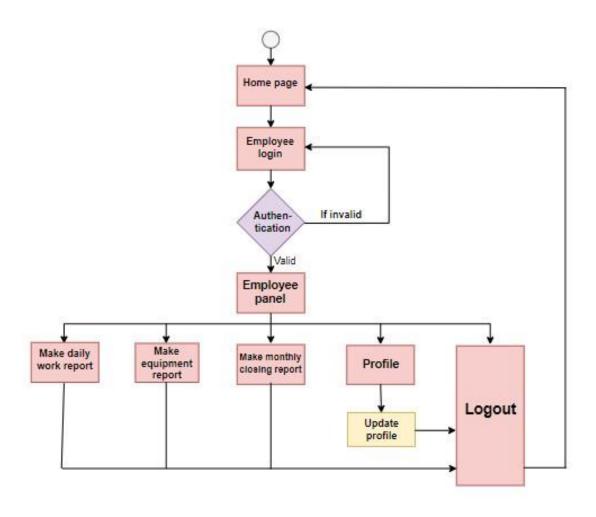


Figure 3.1.3: Activity Diagram for Employee

3.2.1 Dataflow Diagram

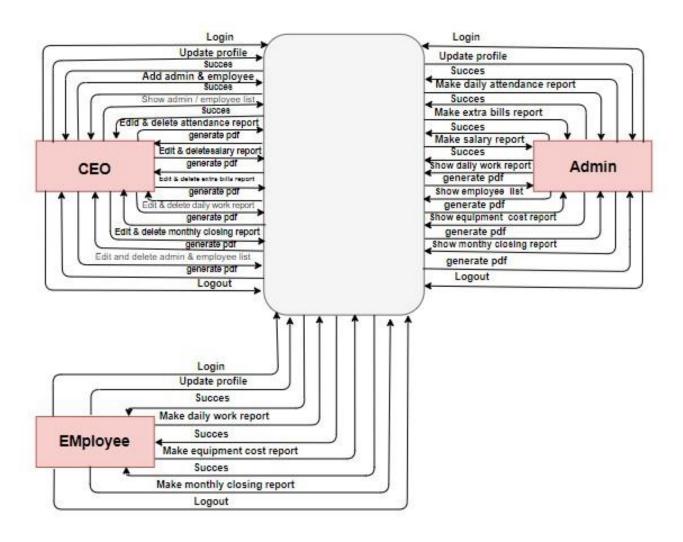


Figure 3.2.1: Dataflow diagram

3.3 ER Diagram:

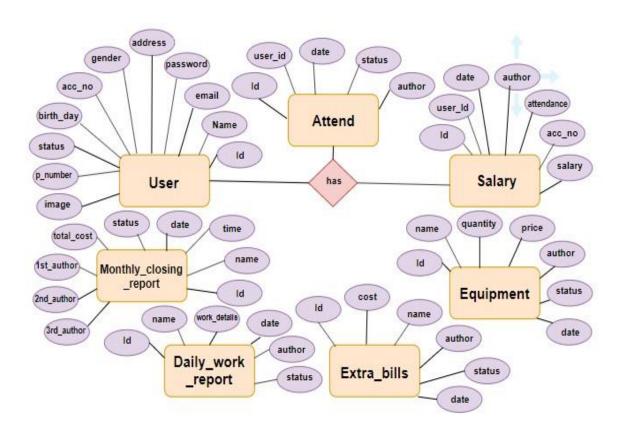


Figure 3.3: ER Diagram

Chapter 4: System Test & Development

4.1 Introduction:

This web application is a services application; this system will provide service daily work management of a company. There are several type of users and many features on this system. So I think this application requires on this system. To ensure an application quality, testing need to be done. The user use will give some data so be careful about the data. I've worked with that test they are given below

- Functional Testing
- **O** Unit Testing
- Integration Testing
- **O** System Testing
- Acceptance Testing

4.2 Features to be tested:

Table- 4.2: Features to be tested

Feature	Priority	Description
Login	2	User must be authenticated by login.

Add user	2	To become a member for any type of user, they need to be registered by admin or ceo.
Update profile	1	For update profile user need to be first login with valid email and password
Separate user panel	3	User can login his own panel by his valid email.
Admin take daily attendance report	2	Admin take daily attendance and make it to as a report.
Admin will make monthly extra bills report	1	Admin make an extra bills report last week of the month.
Admin will make salary report	2	Admin make all employees and admin salary report depend on attendance report
Admin can only see all reports which is employee provided search by date.	1	Admin check daily reports which is provided by employees for make other reports
Employee will make daily work report	1	Employee make a work details list every day.
Employee will make equipment cost report	1	Employee make a report about equipment cost for every product.
Employee will make monthly closing report	2	Employee will make a monthly closing report in last week end of the month.
Only ceo can edit and delete all reports search by date.	3	Any user cannot edit and delete any data and reports without ceo.
Logout	2	Session must be destroy after logout.

Here,

- 1 = Low Priority,
- 2 = Medium Priority,
- 3 = High Priority

4.3 Testing Strategy:

Testing strategy determines the projects approach to testing. I will first check that requirement then I will verify requirement whether it work correctly. It is also the indicator of test that are to be performed on the whole software development life cycle. Keep the application started I will follow a few step of testing. First of all, I did the functional testing then unit testing then I did Integration testing then System testing and at last I did Acceptance testing.

4.4 Test Case Table

Table 4.4.1: Login

Test case #1	Test case name: Log in
System: Employee management system	Subsystem: N/A

Designed by: Shukriti Ranjan Das	Designed date: 02/12/2019
Executed by: Shukriti Ranjan Das	Executed date: 03/12/2019

Short description: If the user will be correct data input then user login successfully.

Pre-conditions:

- User must be add by ceo/admin.
- Assume that, the email id is 'ranjan35-1457@diu.edu.bd' and password is '12345678'

Step	Email	Password	Expected result	Pass/Fail	Comment
1	Ranjan35@	pass	These credentials do not match our records.	Pass	
2	ranjan35-1457@diu.edu.bd		The password field is require.	Pass	
3		12345678	The email field is required.	Pass	
4	ranjan35-1457@diu.edu.bd	password	Successfully login to the application	Pass	

Post-conditions: After the user login then user can see the homepage and many option.

Table 4.4.2: Add User

Test case #2	Test case name: Add User
System: Employee management system	Subsystem: N/A
Designed by: Shukriti Ranjan Das	Designed date: 02/12/2019
Executed by: Shukriti Ranjan Das	Executed date: 03/12/2019

Short description: At first only ceo can add admin or employee both then admin only add employees

Pre-conditions: Ceo must be login.

Step	Action	Response	Pass/Fail	Comment
1	Ceo click to add employee/admin.	Fill up all	Pass	
		required input		
		field		
2	After click add system will add a new	Redirect to same	Pass	
	user	page		

Post-conditions: At first only ceo can do this work.

Table 4.4.3: Update user profile

Test case #3	Test case name: Update user profile
System: Employee management system	Subsystem: N/A
Designed by: Shukriti Ranjan Das	Designed date: 02/12/2019
Executed by: Shukriti Ranjan Das	Executed date: 03/12/2019
	. 011 1 0111 1 11 0

Short description: Every user can update their profile by fill required information

Pre-conditions: •

User must be login.

• Every required field must be filled up by that user.

Step	Action	Response	Pass/Fail	Comment
1	All required fields are not filled yet.	Fields must not be empty.	Pass	
2	All input filed is filled up by the user.	Application will save those information.	Pass	

Post-conditions: Profile update information is saved to the database of the application program properly.

Table 4.4.4: Separate user panel

Test case #4	Test case name: Separate user panel		
System: Employee management system	Subsystem: N/A		
Designed by: Shukriti Ranjan Das	Designed date: 02/12/2019		
Executed by: Shukriti Ranjan Das Executed date: 03/12/2019			
Short description: If any user want to login his panel then he should be enter his valid			

email and password.

Pre-conditions:

• User must be authenticated by our application.

Step	Action	Response	Pass/Fail	Comment
1	You are successfully logged in .	Generate a pop up.	Pass	
2	Your email or password is not valid.	Please enter valid email and password.	Fail	

Post-conditions: User will successfully have logged in his panel.

Table 4.4.5: Admin take daily attendance

Test o	case #5	Test case name	: Admin take	e daily	
		attendance			
Systen	a: Employee management system	Subsystem: N/A			
Design	ed by: Shukriti Ranjan Das	Designed date: 0	02/12/2019		
Execut	ted by: Shukriti Ranjan Das	Executed date: (03/12/2019		
Short	description: Admin take daily atto	endance and then r	nake it as a r	eport.	
Pre-c	onditions:				
•	Admin must be login.				
•	Enter require all information and	date.			
Step	Action	Response	Pass/Fail	Comment	
1	Attendance report is not exixts.	The date	Pass		
	_	already taken			
2	Attendance report is exists	Show a pop up	Pass		
	succesfully.	for saved			

Post-conditions: Your information is saved.

Table 4.4.6: Make salary report

Test case #6	Test case name: Make salary report	
System: Employee management system	Subsystem: N/A	
Designed by: Shukriti Ranjan Das	Designed date: 02/12/2019	
Executed by: Shukriti Ranjan Das	Executed date: 03/12/2019	
CI 4 1 44 A C 11 4	C' 1 1 C'11 1 ' 1 1 '	

Short description: After all requirement field fill up admin can make salary report.

Pre-conditions:

• Admin must be login.

Step	Action	Response	Pass/Fail	Comment
1	All required fields are not filled yet.	Fields must not be empty.	Pass	
2	All input filed is filled up by the admin.	Application will save those information	Pass	

Post-conditions: Admin information is saved to the database of the application program properly.

Table 4.4.7: Monthly extra bills report

Test case #7	Test case name: Take monthly extra		
	bills report		
System: Employee management system	Subsystem: N/A		
Designed by: Shukriti Ranjan Das	Designed date: 02/12/2019		
Executed by: Shukriti Ranjan Das	Executed date: 03/12/2019		
	01 1 1 011 1 1 1		

Short description: After all requirement field fill up admin can make salary report.

Pre-conditions:

• Admin must be login.

Step	Action	Response	Pass/Fail	Comment
1	All required field are not field yet	Fields must not be empty.	pass	
2	All input filed is filled up by the admin.	Application will save those information	Pass	

Post-conditions: Admin information is saved to the database of the application program properly.

Test case #8	Test case name: Admin can view all
	reports employee provided.
System: Employee management system	Subsystem: N/A
Designed by: Shukriti Ranjan Das	Designed date: 02/12/2019
Executed by: Shukriti Ranjan Das	Executed date: 03/12/2019

Short description: Admin can see all reports which is provided by employee.

Pre-conditions:

• Admin must login first.

Step	Action	Response	Pass/Fail	Comment
1	Reports are not view.	Please try again.	Fail	
2	Reports is viewed successfully	Application will view all information.	Pass	

Post-conditions: Admin view the employees information.

Table 4.4.9: Employee make daily work report

Test case #9	Test case name: Employee make daily		
	work report		
System: Employee management system	Subsystem: N/A		

Designed by: Shukriti Ranjan Das	Designed date: 02/12/2019
Executed by: Shukriti Ranjan Das	Executed date: 03/12/2019

Short description: After all requirement field fill up employee can make daily work report.

Pre-conditions:

• Employee must be login and authenticated by application.

Step	Action	Response	Pass/Fail	Comment
1	All required fields are not filled yet.	Fields must not be empty.	pass	
2	All input filed is filled up by the employee.	Application will save those information	Pass	

Post-conditions: Employee information is saved to the database of the application program properly.

Table 4.4.10: Make equipment cost report

Test case #10	Test case name: Make equipment cost	
	report	

System: Employee management system	Subsystem: N/A
Designed by: Shukriti Ranjan Das	Designed date: 02/12/2019
Executed by: Shukriti Ranjan Das	Executed date: 03/12/2019

Short description: After all requirement field fill up employee can make equipment cost report.

Pre-conditions:

• Employee must be login and authenticated by application.

Step	Action	Response	Pass/Fail	Comment
1	All required fields are not filled yet.	Fields must not be empty.	pass	
2	All input filed is filled up by the employee.	Application will save those information	Pass	

Post-conditions: Employee information is saved to the database of the application program properly.

Table 4.4.11: Make monthly closing report

Test case #11	Test case name: Make monthly closing report
System: Employee management system	Subsystem: N/A
Designed by: Shukriti Ranjan Das	Designed date: 02/12/2019
Executed by: Shukriti Ranjan Das	Executed date: 03/12/2019

Short description: After all requirement field fill up employee can make equipment cost report.

Pre-conditions:

• Employee must be login and authenticated by application.

Step	Action	Response	Pass/Fail	Comment
1	All required fields are not filled yet.	Fields must not be empty.	pass	
2	All input filed is filled up by the employee.	Application will save those information	Pass	

Post-conditions: Employee information is saved to the database of the application program properly.

Table 4.4.12: Ceo edit and delete all reports.

Test case #11	Test case name: Ceo edit and delete all reports
System: Employee management system	Subsystem: N/A
Designed by: Shukriti Ranjan Das	Designed date: 02/12/2019
Executed by: Shukriti Ranjan Das	Executed date: 03/12/2019

Short description: Only ceo can view and delete all reports search by date or serially

Pre-conditions:

• Ceo must be login.

Step	Action	Response	Pass/Fail	Comment
1	The report is not edit or delete	Please try again	pass	
2	All reports is edit and delete successfully	You are success	Pass	

Post-conditions: The deleted an updated data will deleted permanently.

Table 4.4.13: Logout User

Test case #2	Test case name: Logout User	
System: Employee management system	Subsystem: N/A	
Designed by: Shukriti Ranjan Das	Designed date: 02/12/2019	
Executed by: Shukriti Ranjan Das	Executed date: 03/12/2019	
Short description: If the user want logout, th	en user will choose logout button and click	
the button.		
Pre-conditions: User must be login.		

Step	Action	Response	Pass/Fail	Comment
1	Click logout from dropdown.	Successfully logout.	Pass	
2	After logout click back and reload.	Redirect to login page	Pass	

4.5 Development:

4.5.1 Tools and Technology

This system is a web application. Tools and technology I used to build this software are alluded below.

- Presentation Layer: HTML5, CSS3, Bootstrap 4, JavaScript, JQuery
- **Application Layer:** PHP, Laravel 6.0
- Data Layer: MySQL.
- **Tools:** Sublime Text 3, Xampp.

4.5.2 Reason behind choosing

- **HTML5:** HTML5 used to make structure of web page.
- **Bootstrap with CSS:** Bootstrape is a css framework and language CSS is a styling.
- JavaScript with JQuery: To make presentation layer interactive

- JavaScript is used and JQuery is its library.
- Laravel with PHP: Laravel is a framework of PHP which uses MVC architecture and used for connecting presentation layer with data layer.
- MySQL: MySQL is a database to manage and manipulate data to make connection with application layer.
- **Sublime Text and Xampp:** Sublime is an IDE or text editor uses for coding. And xampp is a control panel to start database server.

Chapter 5: Risk Management

5.1 Software Risk identification

Risk identification is a process that helps keep our project quality better and reduces the risk of a business environment. Determining the risk for a business organization is very important.

When determining the risk, we must evaluate the risk very accurately so that there is no error. To find out the risk score have to know risk probability and risk impact.

Probability of the risk categorized

Probability of the risk				
Certain	5	The risk is almost certain to occur (greater than		
		80% chance)		
Likely	4	The risk is more likely to occur than not		
		(between 51% and 80% chance)		
Possible	3	The risk is fairly likely to occur (between 21%		
		and 50% chance)		
Unlikely	2	The risk is unlikely but not impossible to occur		
		(between 6% and 20% chance)		
Rare	1	The risk is unlikely to occur (<5% chance)		

Impact of the risk			
Impact of the risk	5		
categorized: Catastrophic			
Major	4		
Moderate	3		
Minor	2		
Negligible	1		

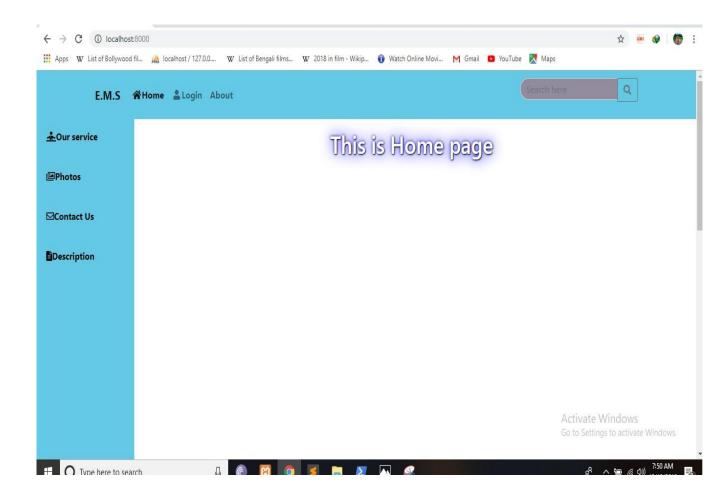
5.2 Software risk Register

Table 5.2: Software risk register

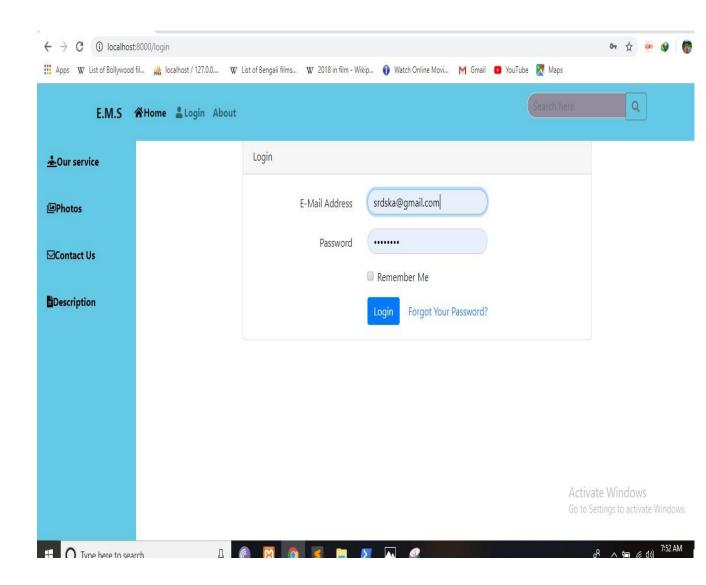
Risk Id	Risk Description	Impact	Probability	Risk Score
1.	Technical Problem	2	3	6
2.	System that crash	4	2	8
3.	Information security	3	3	9
4.	Misunderstand requirement	4	4	16
5.	Decision are low quality	2	3	6
6.	Decision delays impact project	3	2	6

Chapter 6: User manual

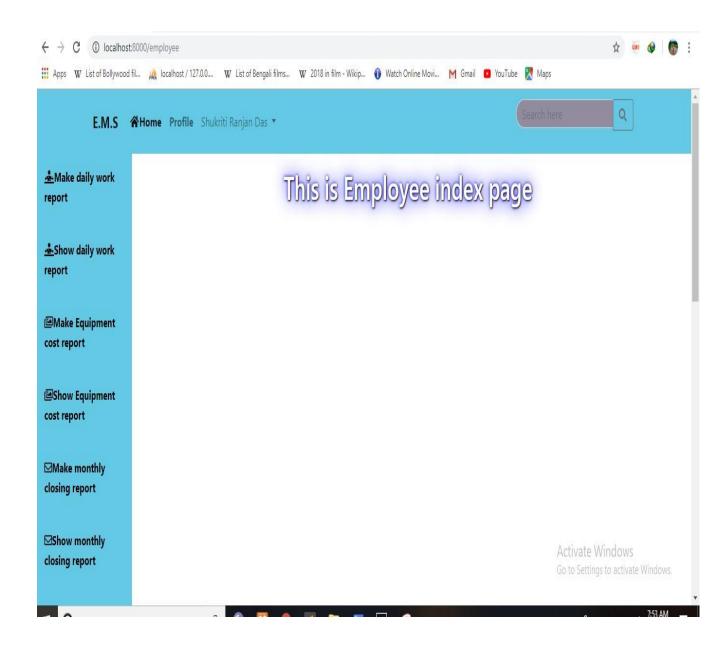
6.1 Home page

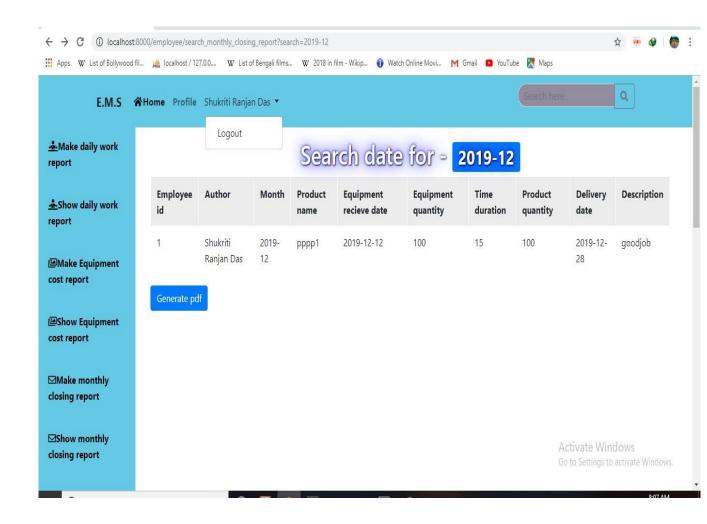


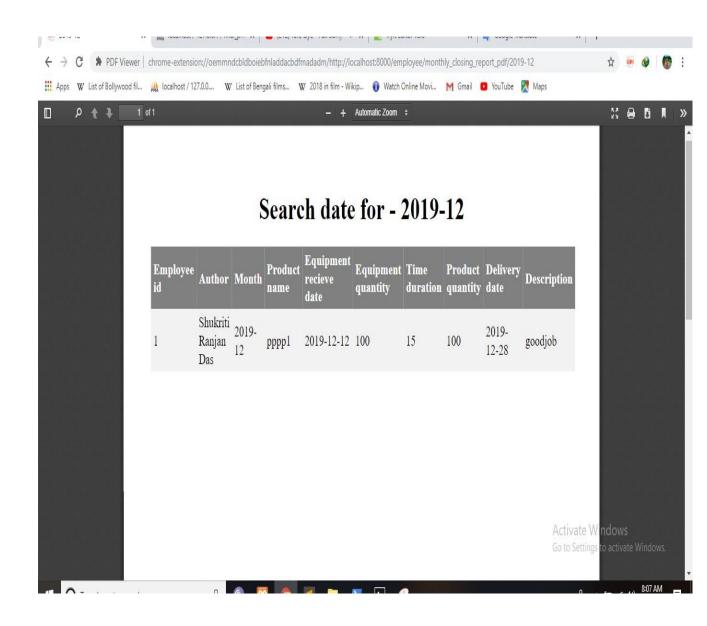
6.2 Login page

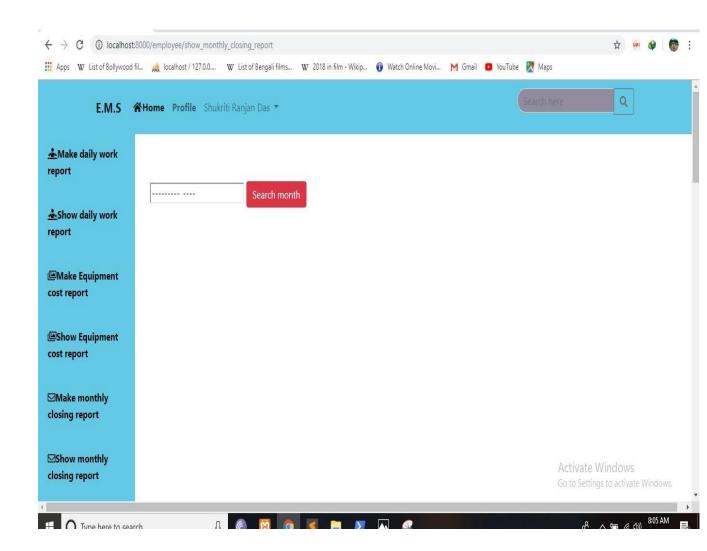


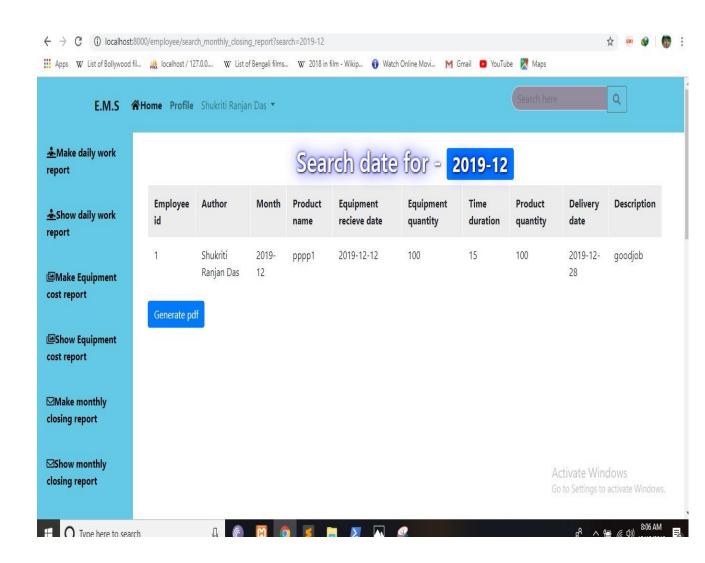
6.3 Employees total work

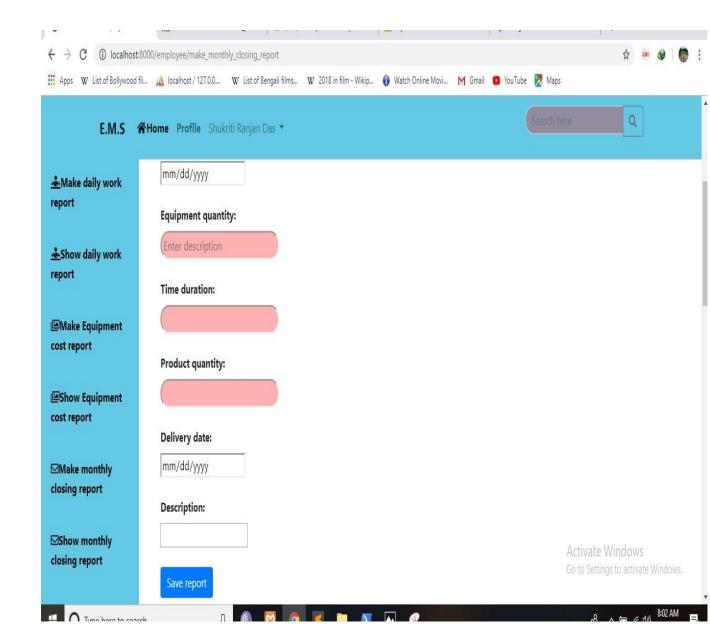


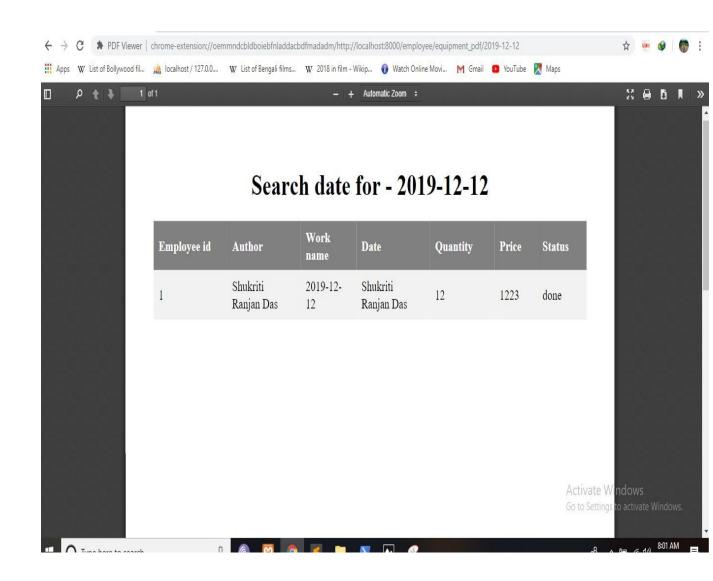


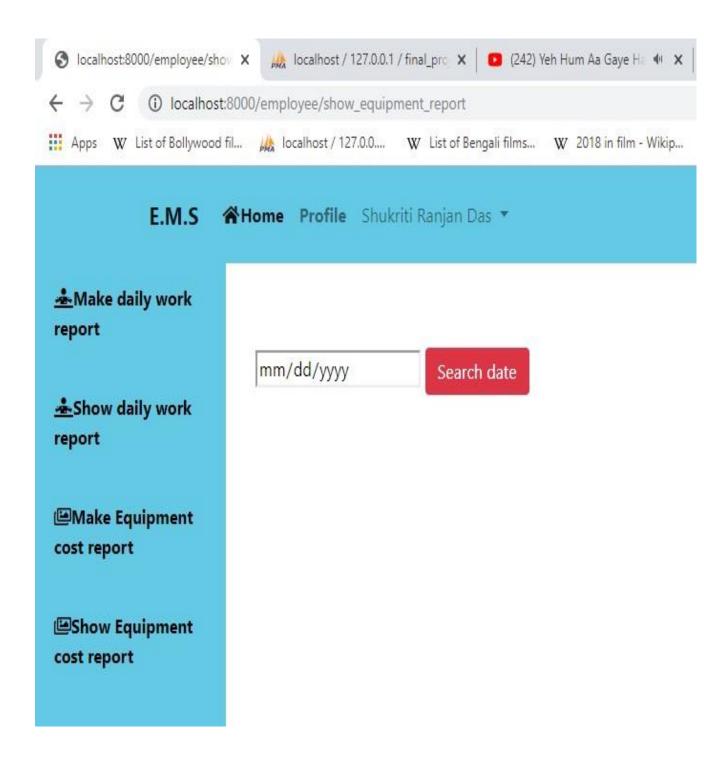


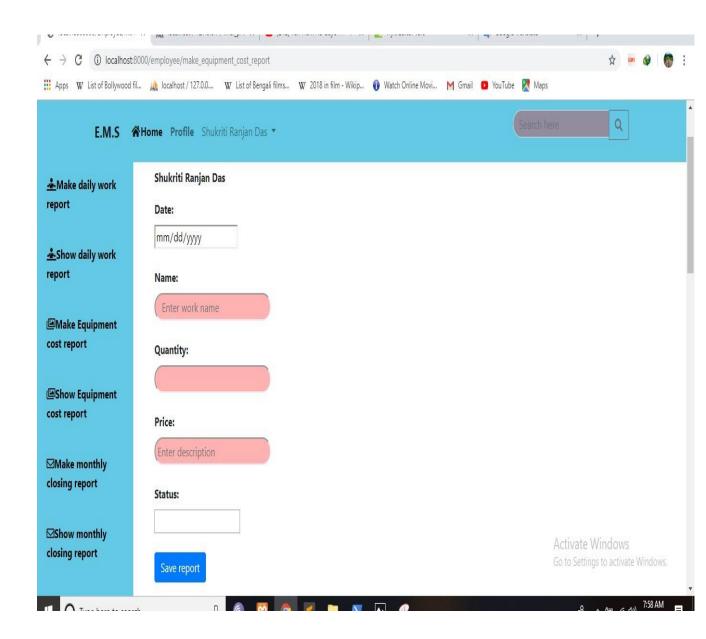


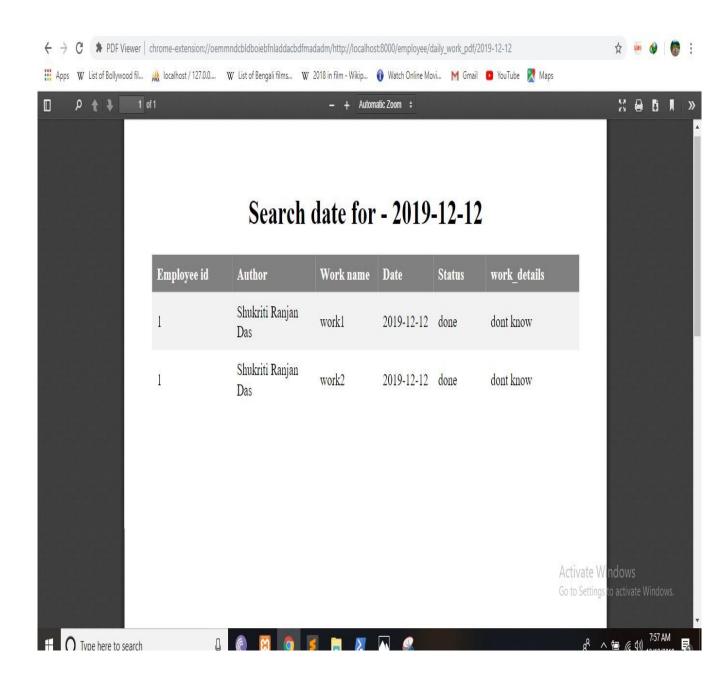


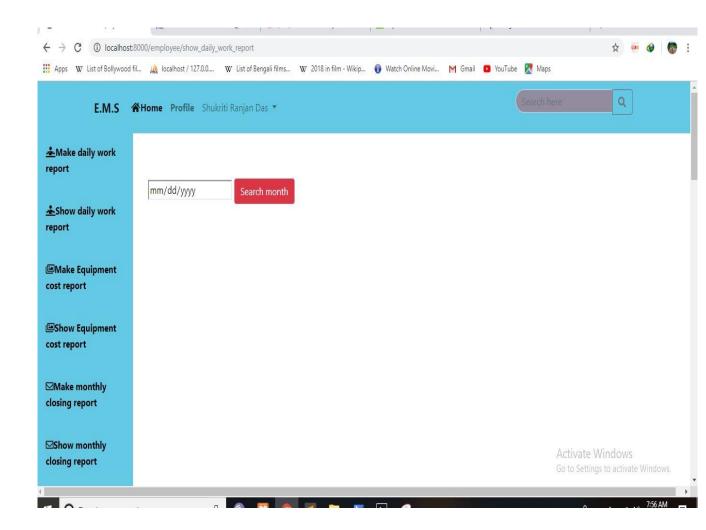


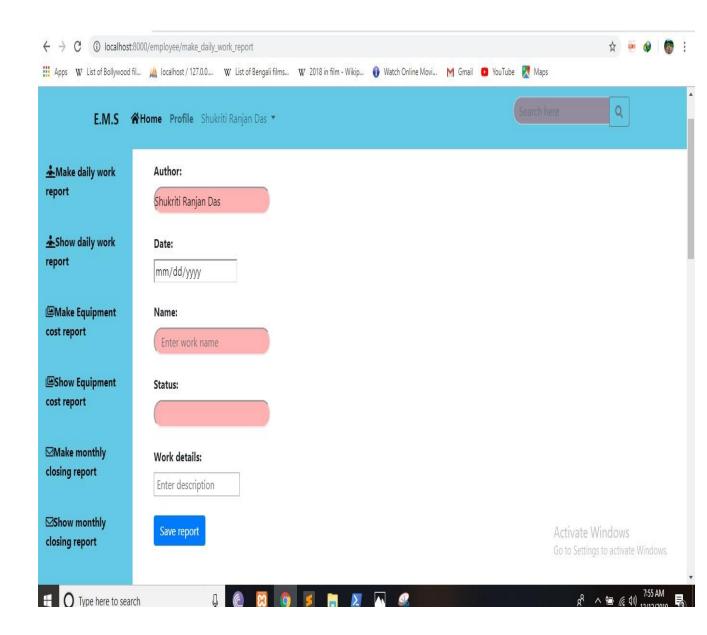




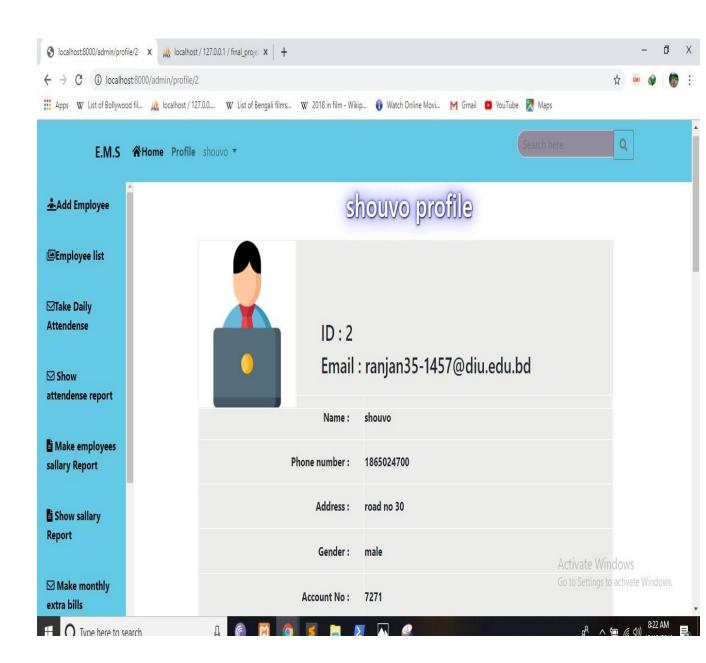


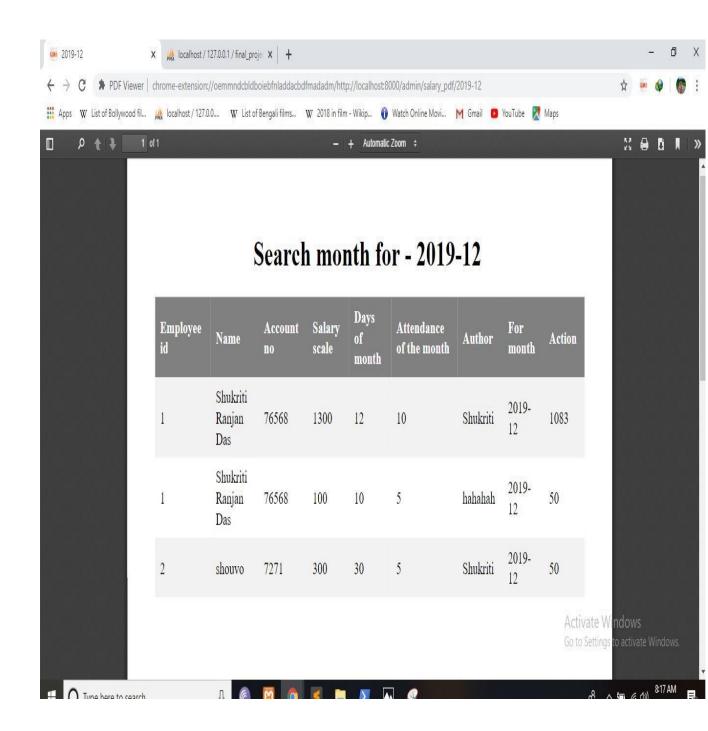


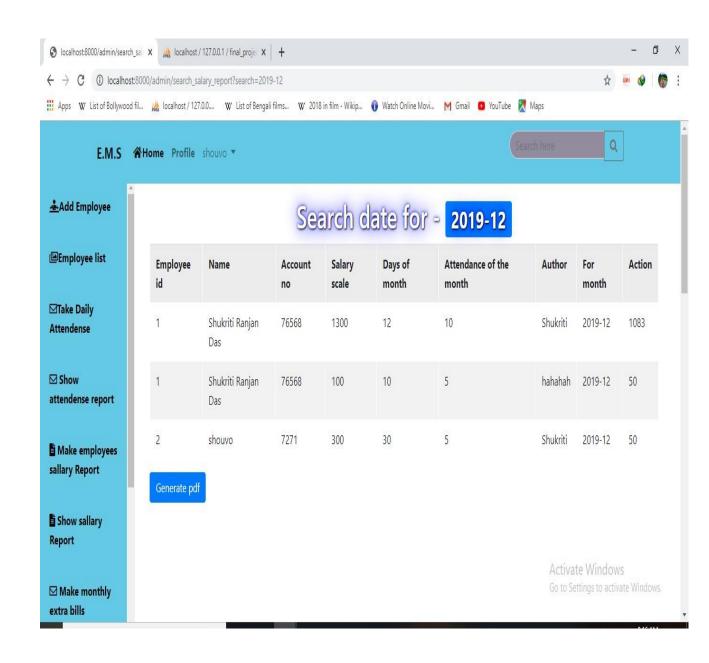


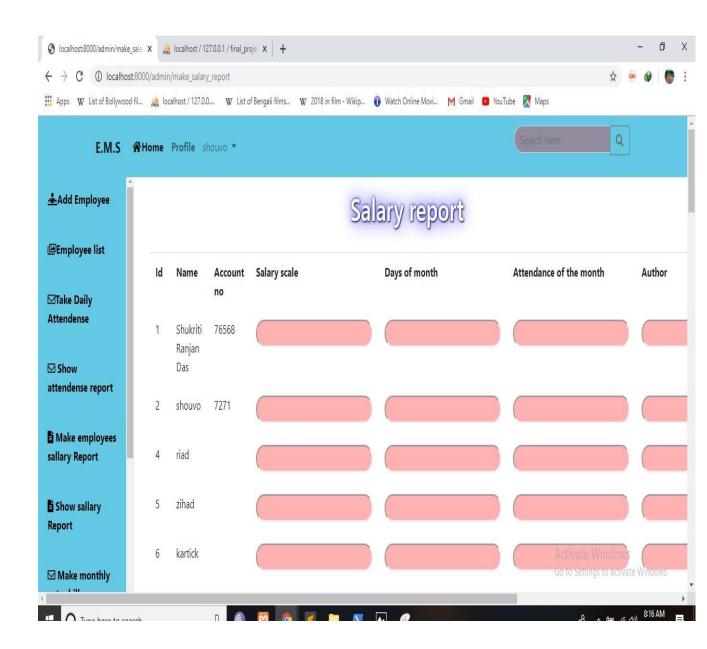


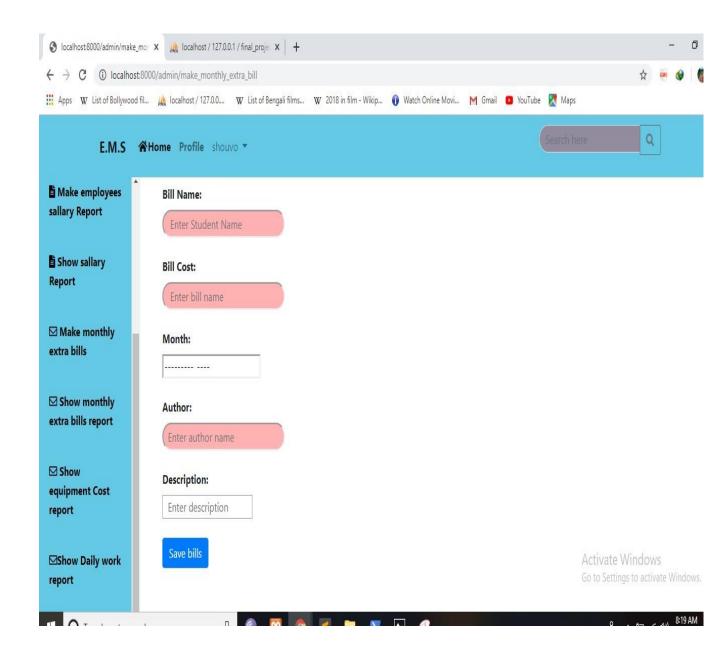
6.4 Admin Total work

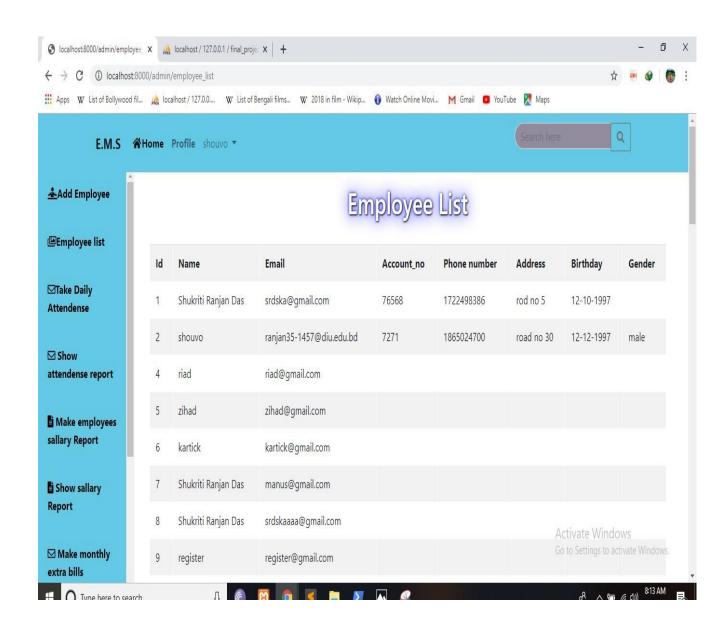


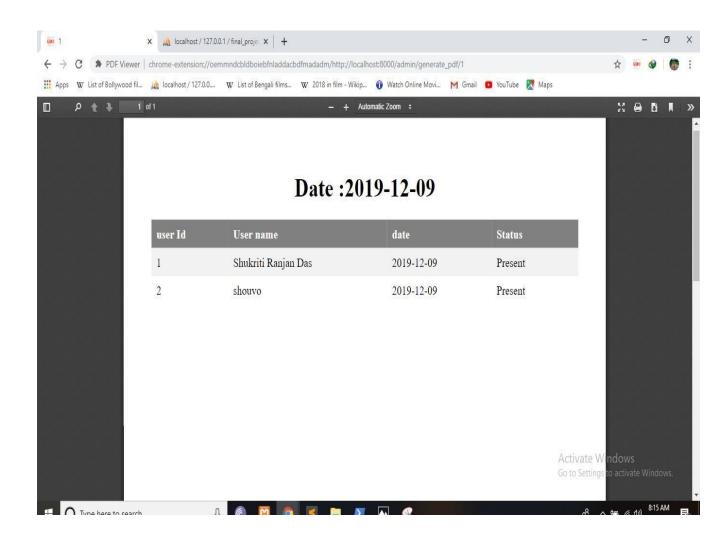


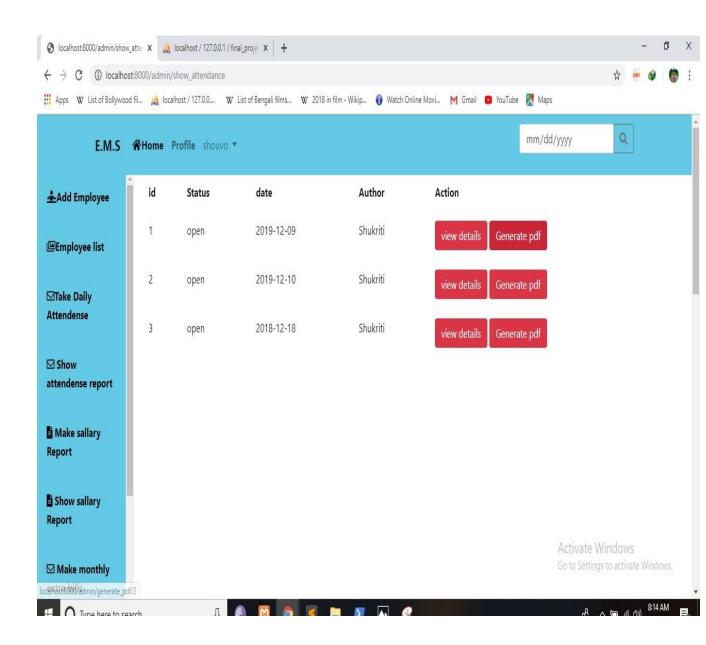


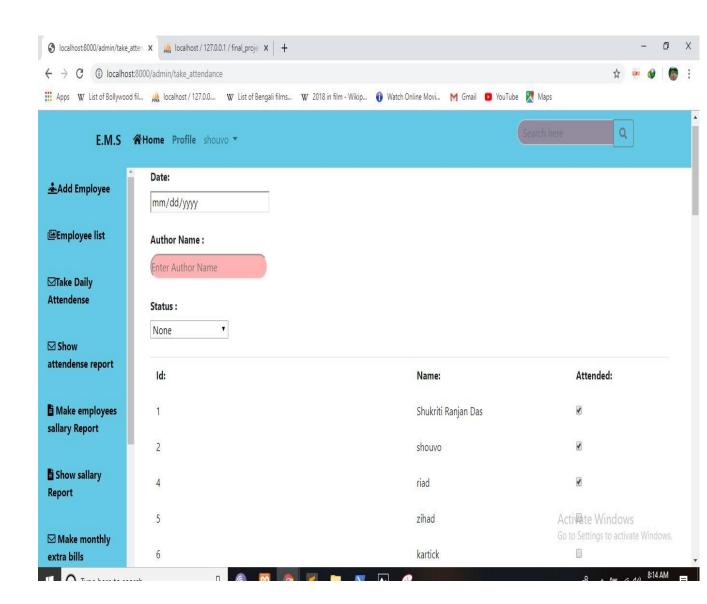


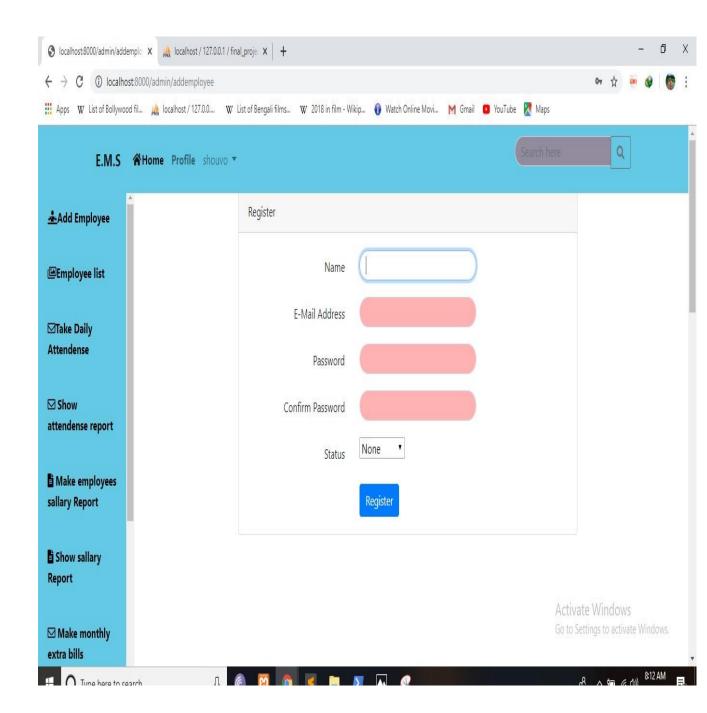


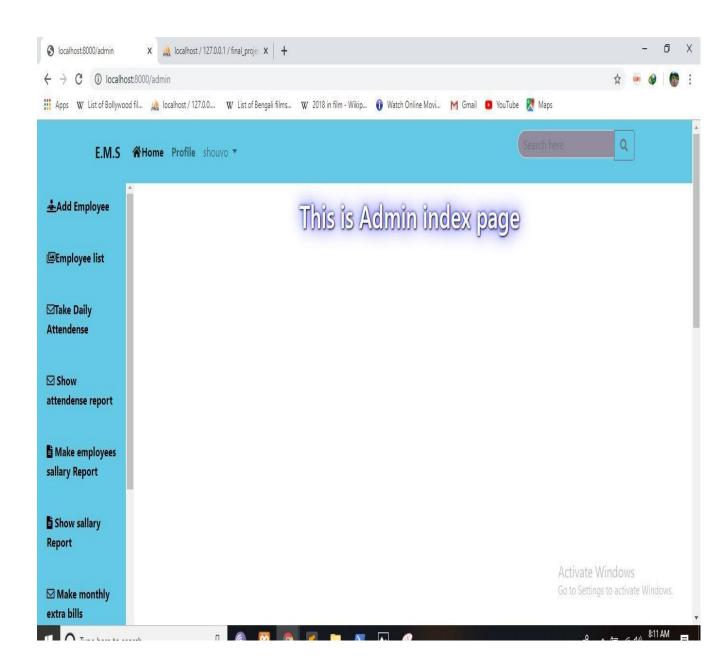


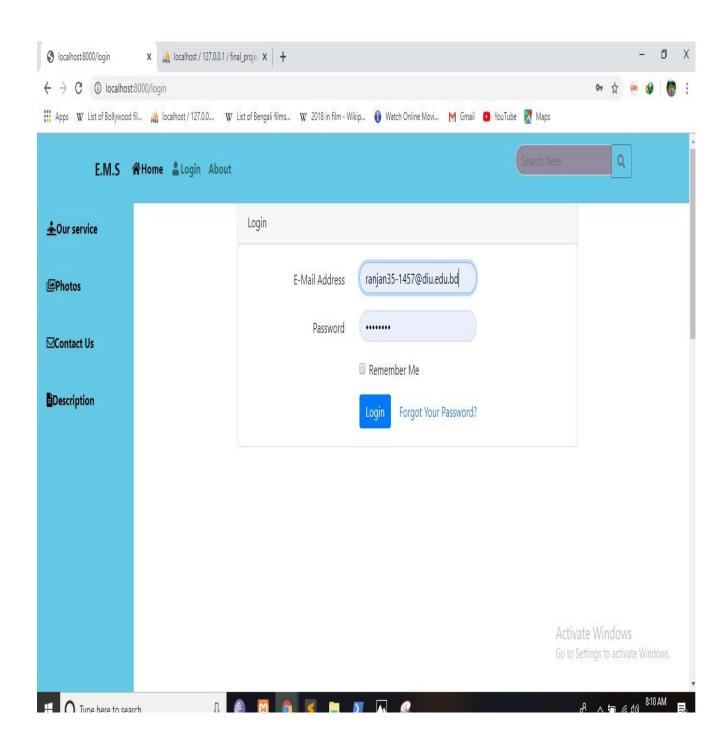


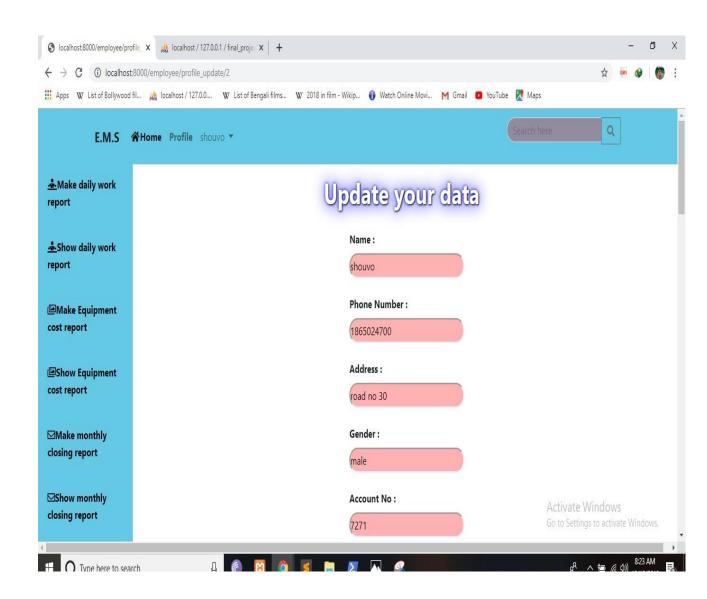




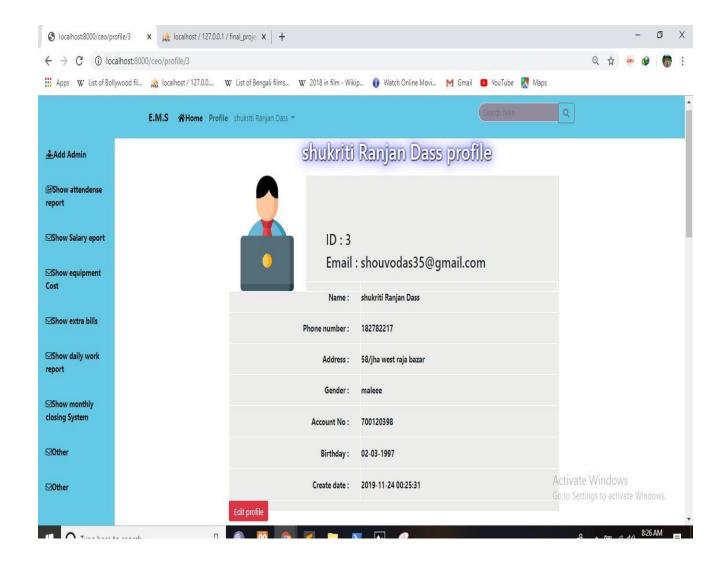


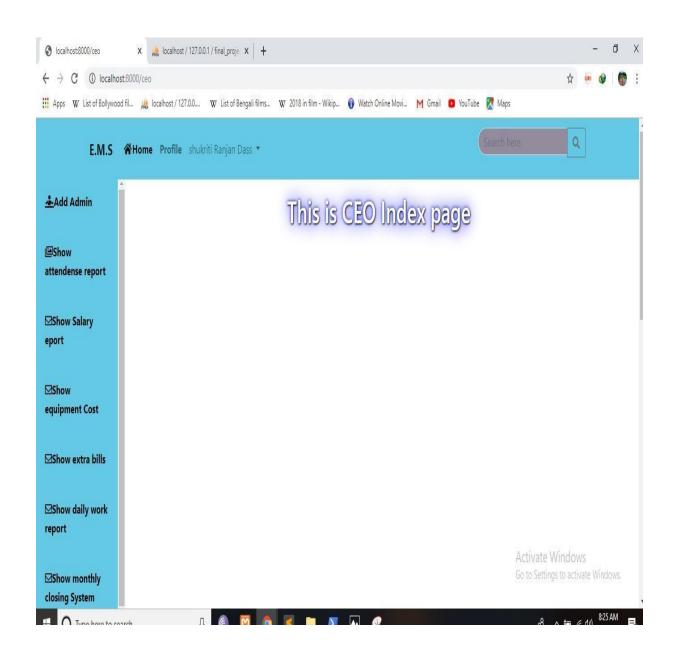


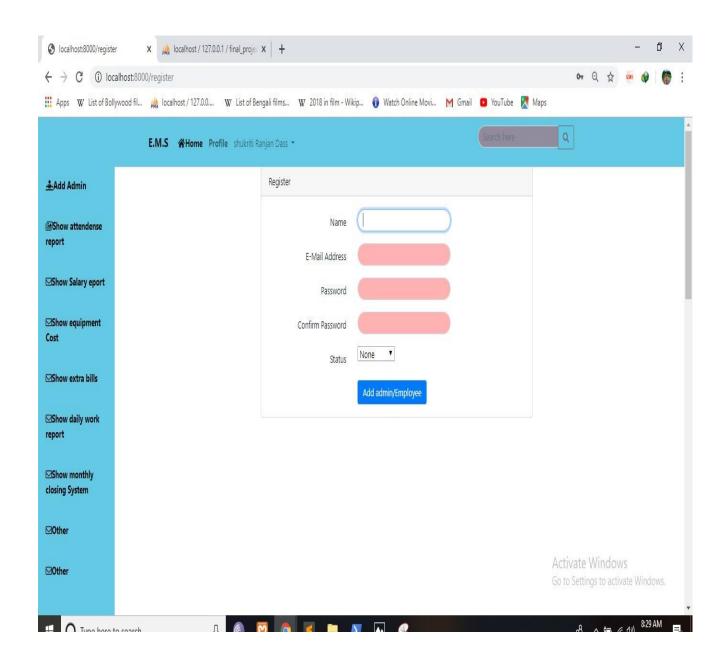




6.4 Ceo Total work







Chapter 7: Conclusion

7.1 Project Summary

I have started the project work from September. I have first discuss to my supervisor then I have done list down the features. After confirming the features then I started the system diagram and database design. After ensure the diagram the diagram and system design of my project then I started the coding part.

After complete the coding part then I am started the testing part. To started testing work I have been taken some idea of testing and that's my supervisor helped me.

7.2 Limitation

I have tried my best to make the application better and fulfill requirements but some of then were not possible make for time shortage.

Payment Method: In my application, there is not having any payment method.

7.3 Future Scope

I think I learned a lot through this project. I would thank them that all the people give me such a nice opportunity and helped me. I think this experience will help me a lot in the future and will support for creating new features.