

# **Project Management**

## **A Project Report**

*Submitted by*

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*In partial fulfillment for the award of the degree of*

**BACHELOR OF ENGINEERING**

**In**

**Information Technology**

**Aditya Silver Oak Institutes of Technology, Ahmedabad**



**Gujarat Technology University, Ahmedabad**

**April, 2023**



## **Aditya Silver Oak Institute of Technology**

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S.G.Highway, Ahmedabad, Gujarat 382481**

### **CERTIFICATE**

This is to certify that the project report submitted along with the project entitled **Internship** has been carried out by **Parth N Shah** under my guidance in partial fulfilment for the degree of Bachelor of Engineering in Information Technology, 8th Semester of Gujarat Technological University, Ahmadabad during the academic year 2022-23.

Prof. Rimpal Popat.

Internal Guide

Prof. Rahul Vaghela.

Head of the Department



## **INTERNSHIP ALLOTMENT**

**Date:** - 20/01/2023

### **TO WHOMSOEVER IT MAY CONCERN**

This is to state that **Parth Shah**, student representing **Aditya Silver Oak Institute of Technology** is assigned Industry Internship as per GTU norms.

We wish him/her all the best to perform in this internship which is to be conducted from 27th Jan 2023 to 3rd May 2023.

**For, Unnati Informatics LLP**



**Huzefa Shakir**  
(Authorised Signature)



## **Aditya Silver Oak Institute of Technology**

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### **DECLARATION**

We hereby declare that the Internship report submitted along with the Internship entitled **Java Trainee** submitted in partial fulfilment for the degree of Bachelor of Engineering in Information Technology to Gujarat Technological University, Ahmedabad, is a Bonafide record of original project work carried out by me at Unnati under the supervision of Prof. RIMPAL PATEL and that no part of this report has been directly copied from any students' reports or taken from any other source, without providing due reference.

Name of the Student

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Sign of Student

---

## Acknowledgment

I am thankful to Aditya Silver oak Institute of Technology for giving me an opportunity to develop this project. Prof. RIMPAL POPAT (Internal Guide) is the main force behind all these. The project became successful only because of their valuable suggestions, proper co-operation and complete guidance in developing this project. It was also the support from the staff members who spend their valuable time in providing us all the relevant and confidential college information which has helped us in preparing our project.

I am thankful to my guide who is the real source of inspiration and encouragement. His constant help, thoughtful suggestions and deep interest has enabled me to make this project successful. I also express my sincere thanks to our H.O.D, who allowed to use all the resources of the institute.

I am thankful to all our staff members who helped continuously and inspired me in the project.

Yours sincerely,

Parth Shah

(191200116068)

## **Abstract**

Project Management involves the planning and organization of a company's resources to move a specific task, event, or duty towards completion. It can involve a one-time project or an ongoing activity, and resources managed include personnel, finances, technology, and intellectual property.

We are building project management application for our client. This is inhouse project for the company. We have mainly three users in this web app admin, project manager and developer. The main purpose of this app is to optimize and get high production from the development team and identify the correct resource allocation path. We do not want a lot of resources occupied on 1 project and other projects are waiting for resources. This app also tracks who is working on what and from how many days. Apps also track the performance of the developer so higher levels can take action on the basis of performance. This is just a basic advantage of this app.

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## **Abbreviations**

**SDLC      Software Development Life Cycle**

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## **Overview of the Company**

### **1.1 About Company**

Unnati Informatics LLP is an IT-based company in Ahmedabad. Its envisaged providing solutions to every IT-related problem in the most cost-friendly way. With this noble vision, its expanded globally giving innumerable IT solutions to our widely existing and growing client and customer base in India, Australia, USA, UAE, Nigeria, and Ghana. It is a leading provider of IT solution and web services in Ahmedabad. We have a team of experts working on website design, software development, SEO, and mobile app development. Our experts is in developing website that reflect our clients vision and needs. With our amazing ideas and team, we hope to empower you to achieve your goals.

### **1.2 Different product/ scope of work**

Unnati Informatics LLP is a leading provider of IT solution and web services in Ahmedabad. We have a team of experts working on website design, software development, SEO, and mobile app development. Our many fields like Website Design, Graphic Design, Mobile App Development, E-Commerce Development, Search Engine Optimization, Social Media Optimization, Bulk SMS Services, School Management Software.

### **1.3 Services**

Unnati Informatics LLP provides services for following field Software Development, Web-portal Development, Website Designing, E-commerce Development, SEO, Customized App Development, Mobile Data Management Software With cloud hosting facility, etc.

### **1.4 Capacity of Plant**

It has a capacity of 30 employee.

## **Overview of different plant/unit/department/shop of the organization and Layout of the production/process being carried out in company**

### **2.1 List the technical specifications of major equipment used in each department.**

#### **Backend**

- Java
- Node Js
- PHP
- .Net

#### **Frontend**

- Angular
- React
- Vue.js

#### **Database**

- Microsoft SQL Server
- PostgreSQL
- MySQL
- mongo DB

#### **Clouds & DevOps**

- AWS
- Google Cloud

- Kubernetes

### **Mobile**

- IOS
- Android
- Flutter

## **2.2 Prepare schematic layout which shows the sequence of operation for manufacturing of end product.**

The production is carried out in following steps

1. Planning
2. Analysis
3. Design
4. Implementation
5. Deployment
6. Maintenance



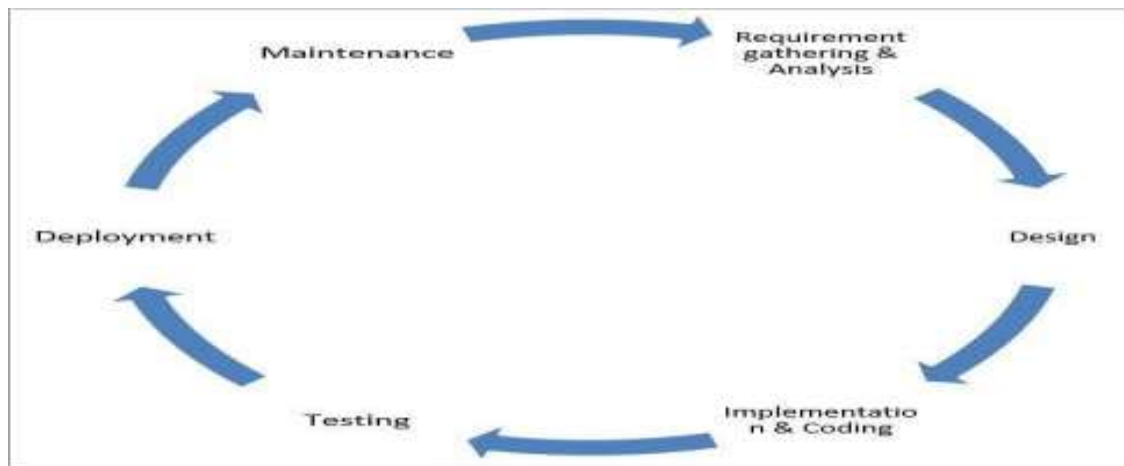


Figure 2.2.1 SDLC

## 2.3 Explain in details about each stage of production.

### 1) Requirement Gathering and Analysis

We have collected all the information regarding project. Once requirement gathering is done, an analysis is done to check the feasibility of the development of a product. Once the requirement is clearly understood. This document should be thoroughly understood by the developers and also be reviewed by the admin.

### 2) Design

In this phase, the requirement is used for implementing system development is derived. We have design all the login, signup, my profile, project, task, module, users page etc. through JAVA, HTML, CSS, JavaScript.

### 3) Implementing or Coding

Implementation/Coding started according to the requirement. The Website design is translated into source code. All the components of the software are implemented in this phase. Java is used for implementation. We used MVC Structure to for implementation.

#### **4) Testing**

Testing starts once the coding is complete and the modules are released for Testing. In this phase, the developed software is debug thoroughly and any defects found are assigned back to get them fixed. Tester refer data base to make sure that all the requirement is as per the admin's guideline.

#### **5) Deployment**

Once the product is debug and ready, it is deployed in the production environment or first is done depending on the admin expectation.

#### **6) Maintenance**

After the deployment of a product on the production environment, monitoring of the product i.e., if any issue comes up and needs to be fixed or any enhancement is to be done is taken care by the developers.

## Introduction to Project

### 3.1 Project Summary

Project management involves the planning and organization of a company's resources to move a specific task, event, or duty towards completion. It can involve a one-time project or an ongoing activity, and resources managed include personnel, finances, technology, and intellectual property.

- **Developer:**

Developer can watch the project and task status and complete the work.

- **Project Manager:**

Project manager would get the project by the admin and generate a daily task and assign to the developer and give a Estimated Hours for complete a task.

- **Admin**

Admin can manage the user and all the functionality of a project. Only admin can add a user or a developer and upload a image of a particular user. Admin can also manage the project and task and module. Admin can access all the report of the app.

### 3.2 Purpose

The main purpose of this app is to optimize and get high production from the development team and identify the correct resource allocation path. We do not want a lot of resources occupied on 1 project and other projects are waiting for resources. This app also tracks who is working on what and from how many days. apps also track the performance of the developer so higher levels can take action on the basis of performance.

### 3.3 Objective

- Experienced and vetted professionals dominate the industry in scale and scope with an adaptable, extensive network that consistently delivers project process.
- Every admin is insured and seek to provide exceptional service and engage in proactive behavior to developer and project manager.

### 3.4 Scope

Our software is easy to use for both beginners and advanced users.

It features a familiar and well thought-out, an attractive user interface, combined with strong searching insertion.

➤ Some Features-:

- Add project and view project
- Add task and view task
- Status of a project
- Completion Hours of work
- Pending project

## 3.5 Technology and Literature Review

### Literature Review/Background Study

We don't have such an existing application proper like this but there is a similar application is there in the market: -

- We study all the existing application and they also provided the features but some applications are charge and from that we got an idea to build the project.
- However, we got idea to generate the service with extra features and more user- friendly way.

### Technology

The front end used in our project is Java, HTML, JavaScript, CSS, and the back end used is MySQL. We will follow the Iterative model for developing this Project and whole Project will be developed using the SDLC scenario.

### HTML

HTML an initialize of Hyper Text Markup Language for web pages. It provides a means to describe the structure of text-based information in document by denoting text as headings, paragraphs, lists and so on and to supplement that text with interactive forms, embedded images and other objects.

### JavaScript

JavaScript supports the development of both client and server components of web-based applications. On the client side, it can be used to write programs that are executed by a web browser within the context of the web page. On the server side, it can be used to write web server programs that can be process information submitted by a web browser and then update the web browser display accordingly.

## JAVA

Java is a server scripting language, and a powerful tool for making dynamic and interactive software. JAVA is a widely-used object-oriented programming language and software platform that runs on billions of devices, including notebook computers, mobile devices, gaming consoles, medical devices and many other. The rules and syntax of java are based on the C and C++ language.

Java is the most-popular, widely used object-oriented programming language. The security feature of java makes it popular and widely used. Benefit of the Java:

- JAVA is simple and familiar.
- JAVA is object-oriented.
- JAVA is architecture-neutral.
- JAVA is robust and secure.
- JAVA can add, delete, modify data in your database
- JAVA is capable of high performance.

## SQL

- SQL (Structured Query Language) is a special-purpose programming language designed for managing data held in a relational database management system (RDBMS).
- Originally based upon relational algebra and tuple relational calculus, SQL consists of a data definition language and a data manipulation language.
- The scope of SQL includes data insert, query, update and delete, schema creation and modification, and data access control. Although SQL is often described as, and to a great extent is, a declarative language (4GL), it also includes procedural elements.
- Data Definition: Defining tables and structure in the database.
- Data manipulation: Used to manipulate the data within those schema objects.

### 3.6 Project Planning

Project Planning is concerned with identifying and measuring the activities, milestones and deliverables produced by the project. Project planning is undertaken and completed sometimes even before any development activity starts. Project planning consists of following essential activities:

- Scheduling manpower and other resources needed to develop the system.
- Staff organization and staffing plans.
- Risk identification, analysis, and accurate planning.
- Estimating some of the basic attributes of the project like cost, duration, and efforts.

The effectiveness of the subsequent planning activities is based on the accuracy of these estimations. Project management involves planning, monitoring and control of the people, process and the events that occurs as the software evolves from a preliminary concept to an operational implementation. Cost estimation is a relative activity that is concerned with the resources required to accomplish the project plan.

#### 3.6.1 Project Development Approach and Justification

A Software process model is a simplified abstract representation of a software process, which is presented from a particular perspective. A process model for software engineering is chosen based on the nature of the project and application, methods and tools to be used, and the controls and deliverables that are required. All software development can be characterized as a problem-solving loop which in four distinct stages is encountered:

- Requirement analysis
- Design
- Coding
- Testing
- Deployment

## 3.6.2 Project Effort and Time

### Effort Estimation

Each company determines the output it expects from its team members. Let us call the average output of a team member per man-hour as the unit output. Assume that one has to deliver an end-to-end login module's functionality for an application. The time spent on the login functionality should include the corresponding time required for gathering the requirements, doing a requirement analysis, architecture inputs, form design, object/class design, implementing the business rules, data validation and storage, framework (i.e., code for login module's constants, enumerations, utilities), testing, debugging, deployment up to user acceptance, etc. Now, the estimator has to figure out how many man-hours it would take to complete the login module, keeping all these factors in mind.

The sequence of work and dependencies should be considered as they do cause delays in completion. For example, form design should be done first (all the way up to acceptance by the admin), then object design (up to acceptance by the architect), followed by coding (for business rules, calculations, and data validations), internal testing, and user acceptance testing. A wise estimator would always take support from other people to understand the scope of work to do a given task.

Implementing the business rules, data validation and storage, framework (i.e., code for login module's constants, enumerations, utilities), testing, debugging, deployment up to user acceptance, etc. Now, the estimator has to figure out how many man-hours it would take to complete the login module, keeping all these factors in mind. The sequence of work and dependencies should be considered as they do cause delays in completion. For example, form design should be done first (all the way up to acceptance by the admin), then object design (up to acceptance by the architect), followed by coding (for business rules, calculations, and data validations), internal testing, and user acceptance testing. A wise estimator would always take support from other people to understand the scope of work to do a given task.



### 3.6.3 Roles and Responsibilities

This phase defines the role and responsibilities of each and every member involved in developing the system. To develop this system there was only one members working on the whole application. Developer was responsible for each and every part of developing the system.

1. **Developer:** Developer can watch the project and task status and complete the work.
2. **Project Manager:** Project manager would get the project by the admin and generate a daily task and assign to the developer and give an Estimated Hours for complete a task.
3. **Admin:** Admin can manage the user and all the functionality of a project. Only admin can add a user or a developer and upload a image of a particular user. Admin can also manage the project and task and module. Admin can access all the report of the app.

### 3.7 Project Scheduling (Gantt Chart)

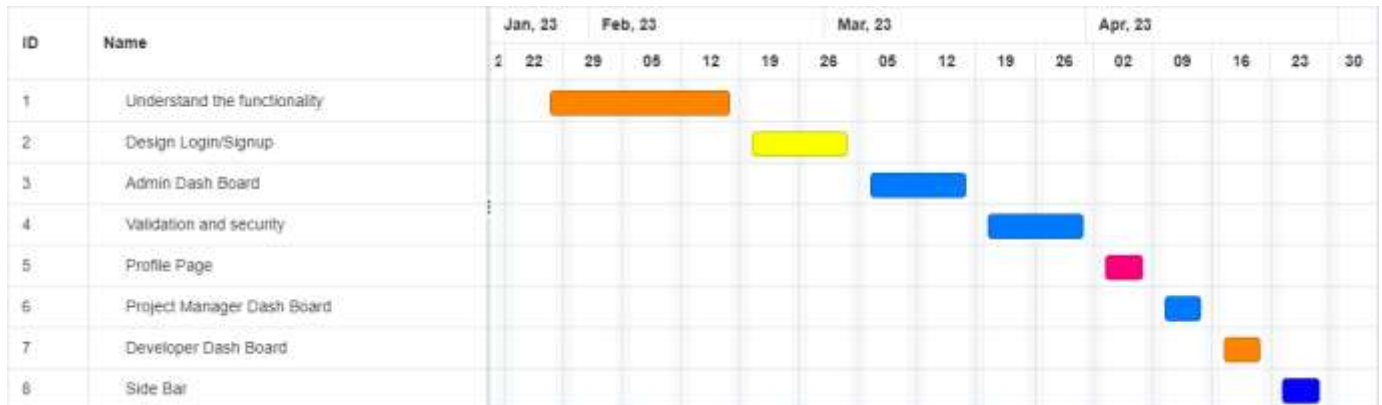


Fig 3.7.1 Gantt Chart

## **System Analysis**

### **4.1 Study of Current System**

- Currently there is a system in the market named Manage Engine which provides services for project management.
- It provides the services for all types of project, task, and module.
- Its also provides daily email of a task and assign project details.

### **4.2 Problem and Weakness of Current System**

In this platform every time the new admin provides the project So here, we cannot get another work with a chosen admin. Here the admin can manage and also update a information about all the functionality in the software.

### **4.3 Requirements of New System**

In the new system, the admin can change a users details and get a report of a application. Admin dashboard is give a details of the project that running, complete and pending. And also give a total project complete this year by the company so admin can get a proper idea of a company needs.

### **4.4 System Feasibility**

#### **4.4.1 Does the system contribute to the overall objectives of the organization?**

Our project is capable to be implemented at an organization level. And, having objectives that outline an organization's focus can help employees stay focused and create cohesion in the workplace. These objectives should align with a company's vision and communicate its values. In this article, we discuss why the objectives of an organization are important, how to organize these objectives, the goals of organizational objectives and elements of good objectives. The objectives of an organization are important because they help

every member of the organization, from stakeholders to entry-level employees, understand the company's mission.

#### **4.4.2 Can the system be implemented using the current technology and within the given cost and schedule constraints.**

We have implemented this project using the existing version of all the technologies used in it. We have not invested a single coin in this project. We have tried to cover all the user requirements to provide the maximum comfort to them, so we can achieve the long-term objectives with the maximum unique features. As requirements are gathered an overall version of system functions and features begins to materialize.

At project inception, software engineers ask a set of questions that establish:

- Basic understanding of problem.
- The people who want to use various services.

### **4.5 Activity of New System**

#### **4.5.1 Use-Case:**

- In software and systems engineering, a use case is a list of steps, typically defining interactions between actor and a system, to achieve a goal.
- The actor can be a human, an external system, or time.
- In systems engineering, use cases are used at a higher level than within software engineering, often representing missions or stakeholder goals.
- The detailed requirements may then be captured in Systems Modeling Language or as contractual statements.
- As an important requirement technique, use cases have been widely used in modern software engineering over the last two decades.
- Use case driven development is a key characteristic of process models and frameworks.
- With its iterative and evolutionary nature, use case is also a good fit for agile development.

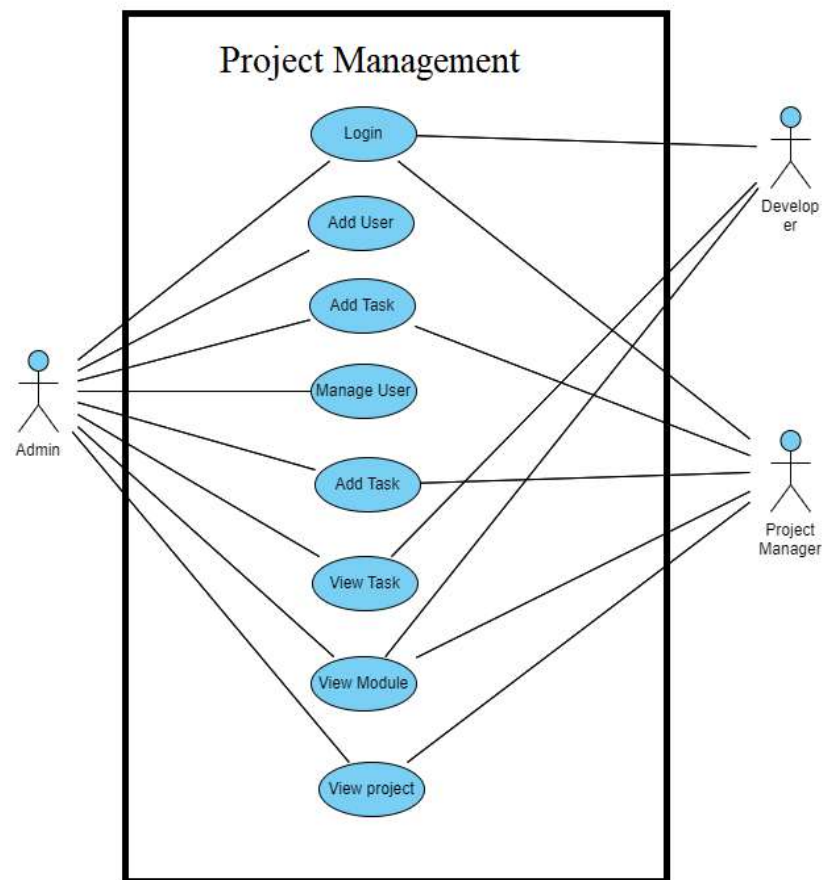


Figure 4.5.1 Use-Case System

### 4.5.2 Activity Diagram

#### Admin

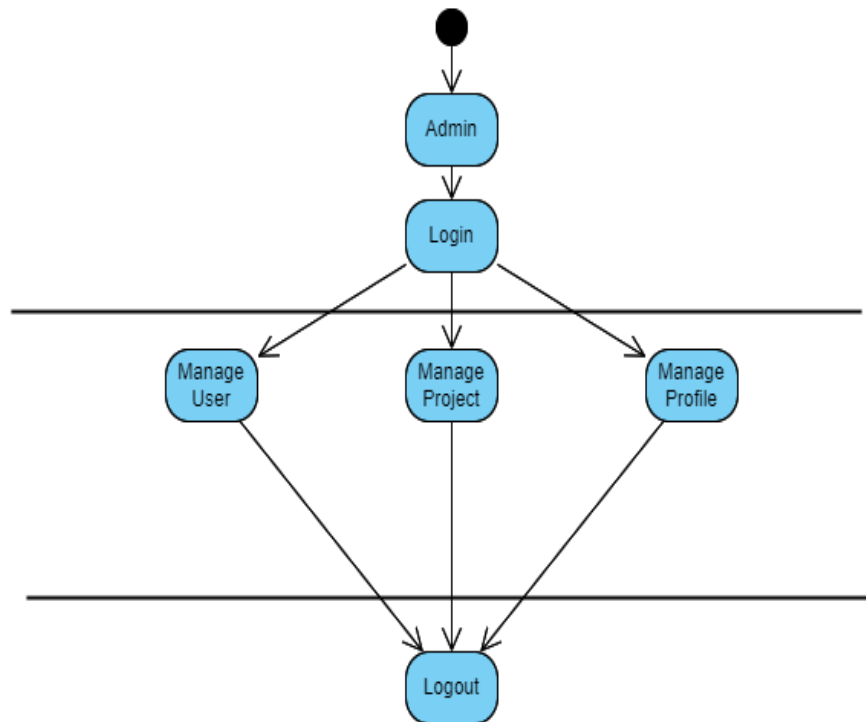


Figure 4.5.2 Activity Diagram (Admin)

## Project Manager

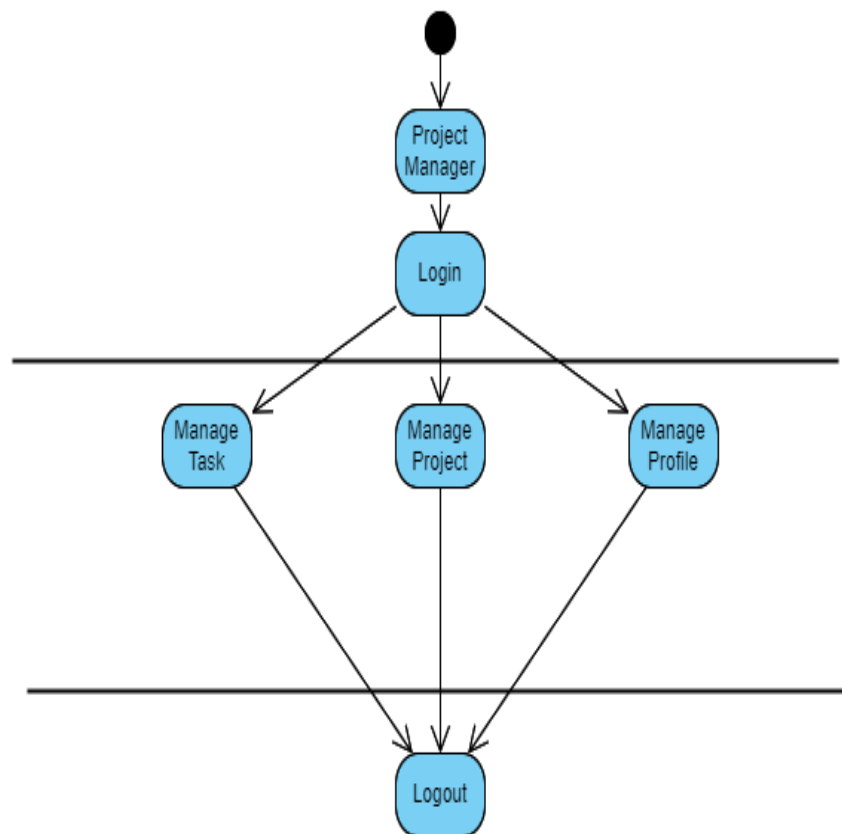


Figure 4.5.3 Activity Diagram (Project Manager)

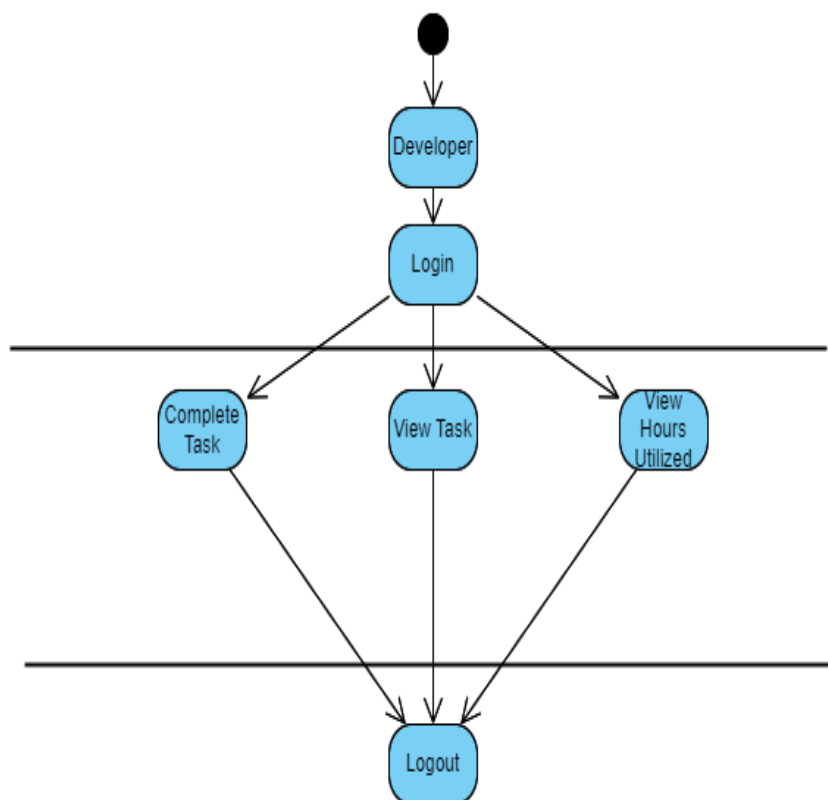
**Developer**

Figure 4.5.4 Activity Diagram (Developer)



### 4.5.5 Sequence Diagram

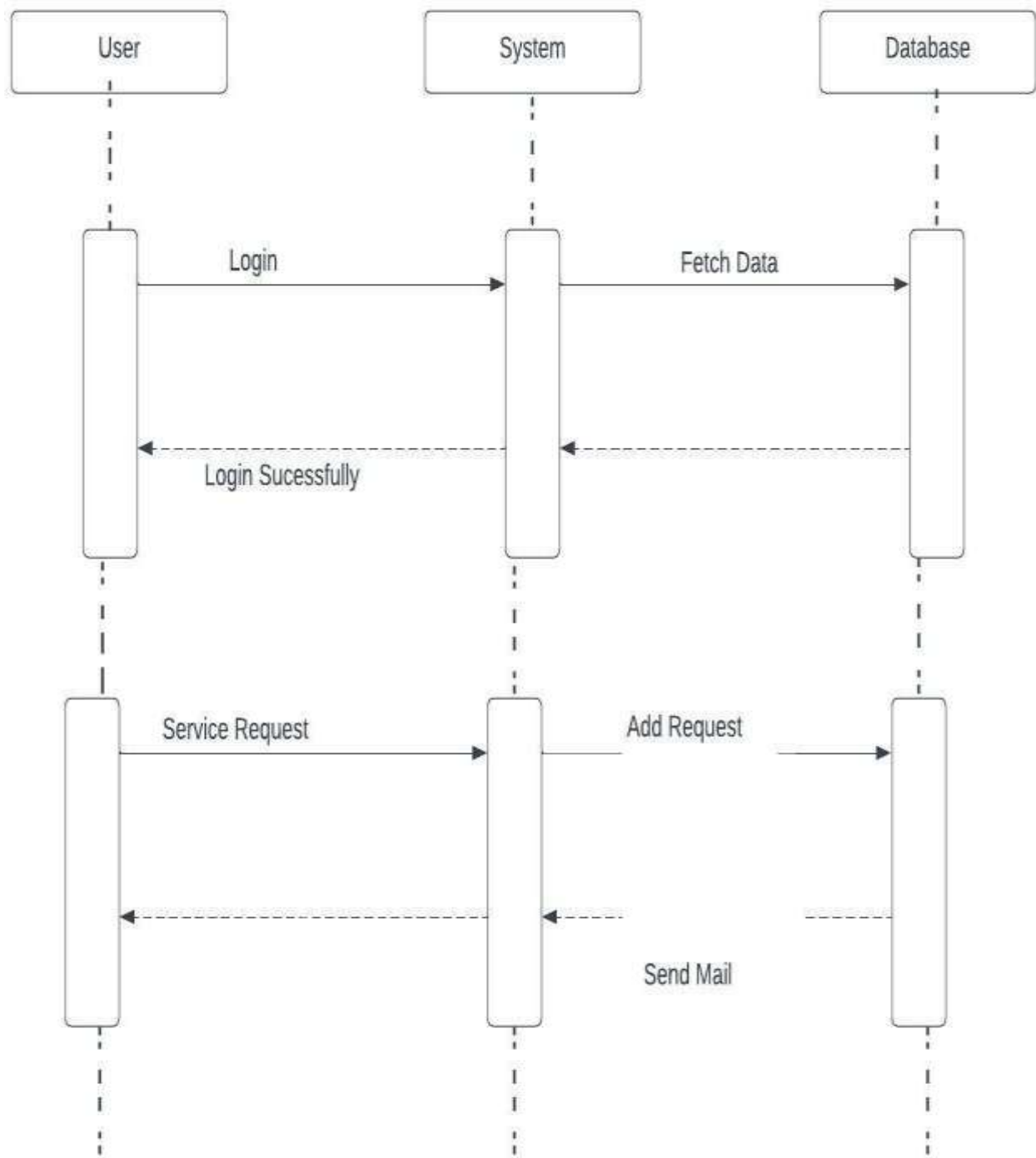


Figure 4.5.5 Sequence Diagram

#### 4.5.6 E-R Diagram

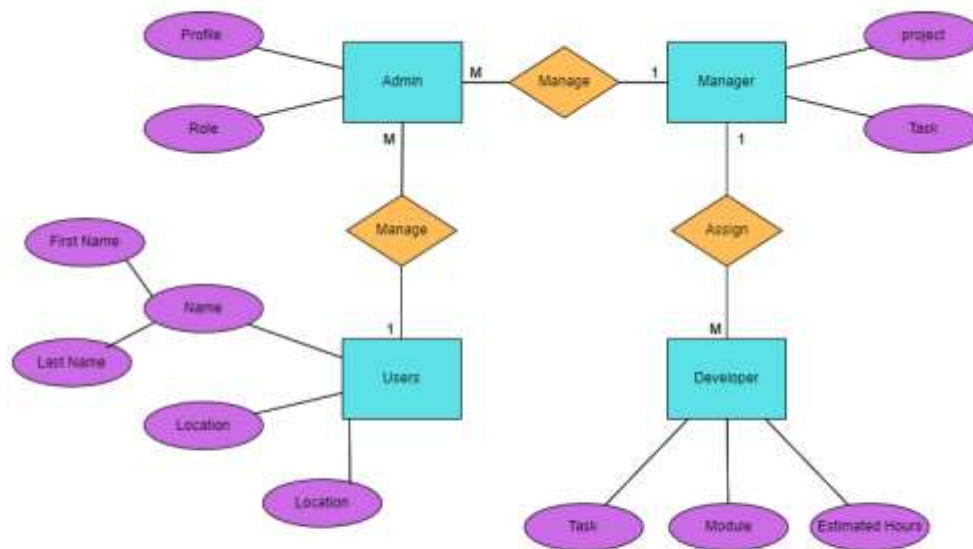


Figure 4.5.6 E-R Diagram

### 4.5.7 Class Diagram

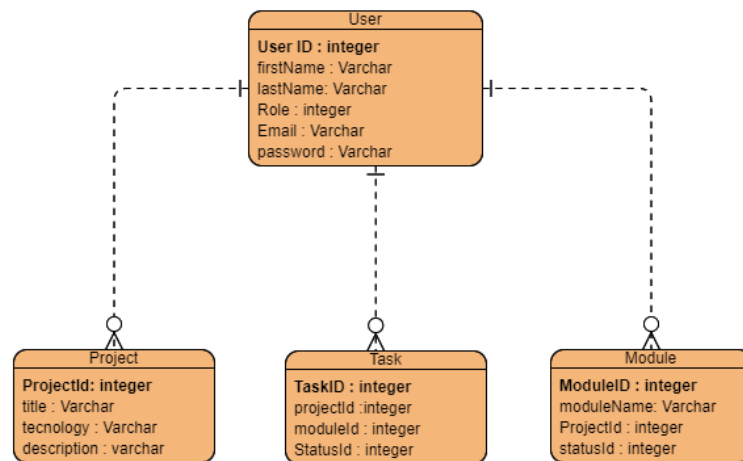


Figure 4.5.7 Class Diagram

## **4.6 Features of New System**

### **Friendly & Certified Helpers**

We want you to be completely satisfied with our project and feel comfortable at company software. In order to guarantee this, our developer go through a test daily task completion.

### **Secure URL**

Every users have to login before the using the application. And users can not call the any URL before the login and after the login every member have a unique dashboard open and watch their work and functionality from the role.

## **4.7 Modules and Their Description of System**

### **4.7.1 Signup/ Login Module**

#### **Login**

Clicking on Login link in header should open a popup and allow user to log in to the system. This Login screen would be central place to allow different types of users logging in to the system i.e., Developer, Project Manager and Admin users. This would redirect them to respective landing page.

## **Signup**

Developer and project manager should not be able to register themselves using sign up screen. Only admin should be able to add and remove the users and separately designed page where admin would be redirected when they click on add user link in dashboard dialog. Developer and manager should be able to login to the system once they create their account by admin.

### **4.7.2 Developer's Module**

#### **Dashboard**

- Developer should be able to view their task on the dashboard. This screen should show all the task that assign to the developer and are not completed or complete.
- The assign task listing must show the details as shown in the above image.
- In the details of the task that show to developer in that the details of the project is also show and in this the module name and the URL of the document is also attach in the list page and developer is access it and open the URL.
- Add and remove the profile photo on the profile option is show to the developer dash board.

### **4.7.3 Project ManagerModule**

#### **Dash Board**

- Project manager can access the all the functionality that provides to the developer and also able to do the CRUD operation of a task and module.
- In this they can track and get all the work report of the task that assign to the developer by them.
- And the manager have to report their work to the admin of a project that can be assign by the admin.

#### **4.7.4 Admin Module**

##### **Dash Board**

- Admin should also manage all the users. It can Active or Deactivate the Users. So, by deactivating the users the users would not login in the system.
- Admin can able to do all the CRUD operation in the project, module, task and assign the project and task to developer and project manager.
- Admin can also add and remove the profile photo of the user and also update a photo.

### **4.8 Selection of Hardware and Software Characteristics**

#### **Hardware Requirements**

- Minimum 2.27Ghz processor
- RAM: 2GB minimum Software Requirements.

#### **Software Requirements**

- Spring Boot (For live preview)
- SQL Database
- XAMPP
- Tomcat Server

## System Design

### 5.1 System Design & Methodology

Systems design is the process of defining the architecture, components, modules, interfaces, and data for a system to satisfy specified requirements. The System Design Description report provides summary or detailed information about a system design represented by a model. Systems design is therefore the process of defining and developing systems to satisfy specified requirements of the user.

### 5.2 Database Design

Database design is the process of producing a detailed data model of a database. This logical data model contains all the needed logical and physical design choices and physical storage parameters needed to generate a design in a Data Definition Language, which can then be used to create a database. A fully attributed data model contains detailed attributes for each entity.

#### Project Management– Data Dictionary

Table 5.2.1: Users

Table Name	Users			
Field Name	Data Type	Length	Nullable	Comments
User_Id	Int	10	No	Its Primary Key.
firstName	Varchar	30	Yes	
lastName	Varchar	30	Yes	
Email	Varchar	50	Yes	
Password	Varchar	80	Yes	
Role	Int	10	Yes	
Otp	Varchar	10	Yes	
Deleted	Boolean	1	Yes	
imageUrl	Varchar	1024	Yes	

Table 5.2.2: Project

Table Name	Project			
Field Name	Data Type	Length	Nullable	Comments
ProjectId	Int	10	No	Its Primary Key.
Title	Varchar	50	No	
Description	Varchar	500	Yes	
technologyId	Varchar	50	Yes	Its Foreign key of Technology Table.
EstimatedHours	Int	10	Yes	
Startdate	Varchar	20	Yes	
Completiondate	Varchar	20	Yes	
Utilizedhours	Int	10	Yes	
Deleted	Boolean	1	Yes	
statusId	int	10	Yes	Its foreign key of status table.

Table 5.2.3: Status

Table Name	Status			
Field Name	Data Type	Length	Nullable	Comments
StatusId	Int	10	No	Its Primary Key.
Status	Varchar	30	Yes	



Table 5.2.4: Task

Table Name	Task			
Field Name	Data Type	Length	Nullable	Comments
TaskId	Int	10	No	Its Primary Key.
ModuleId	Int	10	Yes	Its Foreign key of module Table.
projectId	Int	10	Yes	Its Foreign key of project Table.
StatusId	Int	10	Yes	Its foreign key of status table.
EstimatedHours	Int	10	Yes	
TotalUtilizedHours	Int	10	Yes	
Docurl	Varchar	300	Yes	
Description	Varchar	300	Yes	

Table 5.2.5: Technology

Table Name	Technology			
Field Name	Data Type	Length	Nullable	Comments
TechnologyId	Int	10	No	Its Primary Key.
Technologyname	Varchar	30	Yes	
deleted	InBoolean	1	Yes	

Table 5.2.6: Module

Table Name	Module			
Field Name	Data Type	Length	Nullable	Comments
ModuleId	Int	10	No	Its Primary Key.
ModuleName	Varchar	50	yes	
Projected	Int	10	Yes	Its foreign key of project Table.
Statusid	Int	10	Yes	Its foreign key of status Table.
Description	Varchar	300	Yes	
Docurl	Varchar	512	Yes	
estimatedHours	Int	10	Yes	
totalUtilizedHours	Int	10	Yes	

Table 5.2.7: Task\_User

Table Name	Task_User			
Field Name	Data Type	Length	Nullable	Comments
Task_UserId	Int	10	No	Its Primary Key.
UserId	Int	10	Yes	Its foreign key of users Table.
taskId	Int	10	Yes	Its foreign key of task Table.
assignStatus	Int	10	Yes	
statusId	Int	10	Yes	Its foreign key of status Table.
UtilizedHours	Int	10	Yes	

Table 5.2.8: Project\_User

Table Name	Project_User			
Field Name	Data Type	Length	Nullable	Comments
Project_UserId	Int	10	No	Its Primary Key.
UserId	Int	10	Yes	Its foreign key of users Table.
projectId	Int	10	Yes	Its foreign key of project Table.
assignStatusId	Int	10	Yes	

## Screenshots

userId	firstName	lastName	email	password	role	otp	deleted	imageUrl
1	parth	shah	parth@gmail.com	parth	1	Y42Z	0	assets/profiles/1/ac.png
5	hello	hi	hello@gmail.com	hi	2	NULL	0	NULL
6	parth	shah	parthparth915@gmail.com	parth	2	NULL	0	NULL
7	janes	bond	janes@gmail.com	janes	3	NULL	0	NULL

Figure 5.2.1 Users DB

projectId	title	description	technologyId	estimatedHours	startDate	completionDate	utilizedHours	deleted	statusId
1	project management	Project Management	1	2	2023-02-11	2023-05-02	2	0	1
2	project management	Project Management	2	1	2023-03-16	2023-05-11	3	0	1
11	project manage	project manage	2	4	2023-03-02	2023-04-12	3	0	2
12	project	project	2	4	2023-03-24	2023-04-22	4	0	2
13	project manaa	Project Management	2	6	2023-03-01	2023-05-22	3	0	3
21	E-Commerce Site	E-Commerce Site	1	10	2023-03-30	2023-06-01	0	0	1

Figure 5.2.2 Project DB

statusId	status
1	NotAssinged
2	Working
3	Complete

3 rows in set (0.02 sec)

Figure 5.2.3Status DB

taskId	moduleId	projectId	statusId	estimatedHours	totalUtilizedHours	docURL	description
1	1	11	2	3	3	project management	Project Managenent
5	1	1	3	NULL	NULL		
6	1	1	3	1	1	project management	Project Managenent

3 rows in set (0.02 sec)

Figure 5.2.4Task DB

technologyId	technologyName	deleted
1	Java	0
2	Python	0

Figure 5.2.5 Technology DB

moduleId	moduleName	projectId	statusId	description	docUrl	estimatedHours	totalUtilizedHours
1	hello	13	3	Project Management	project management	9	3
2	Report	1	1	Parth Report	assets/ModuleUrl/2/2023-02-25 (7).png	7	0

Figure 5.2.6 Module DB

taskUserId	userId	taskId	assignStatus	statusId	utilizedHours
1	5	1	1	2	2

Figure 5.2.7 Task\_User DB

projectUserId	userId	projectId	assignStatusId
1	1	1	NULL
2	1	1	1

Figure 5.2.8 Project\_User DB

## **5.3 System Procedural Design**

### **5.3.1 Design Pseudo code or algorithm for method or operation**

#### **Admin Side**

Step 1: Enter the URL to open the system

Step 2: Click on Login Button for Login

Step 3: Provide email and password

Step 4: If email and password both is correct then it will login successfully.

Step 5: It shows Admin page

Step 6: Admin can able to perform Many operations and Also Access to all pages.

Step 7: Admin contain service request which include project status (New, pending, Completed).

#### **Project Manager**

Step 1: Enter the URL to open the system

Step 2: Click on Login Button for Login

Step 3: Provide email and password

Step 4: If email and password both is correct then it will login successfully.

Step 5: It shows project manager dash board

Step 6: It will Assign the Task and also show the task on project manager dashboard.

Step 7: Logout.

#### **Developer**

Step 1: Enter the URL to open the system

Step 2: Click on Login Button for Login

Step 3: Provide email and password

Step 4: If email and password both is correct then it will login successfully.

Step 5: It shows developer dash board.

Step 6: Developer watch the all the task that assign to him.

Step 7: Logout.



### 5.3.2 Flow Chart

#### Admin

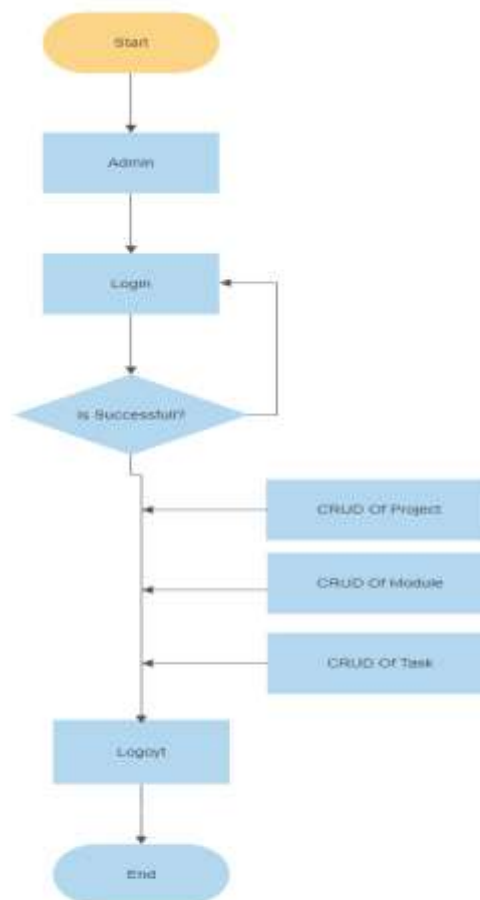


Figure 5.3.2.1 admin flow chart

## Project Manager



Figure 5.3.2.2 project manager flow chart

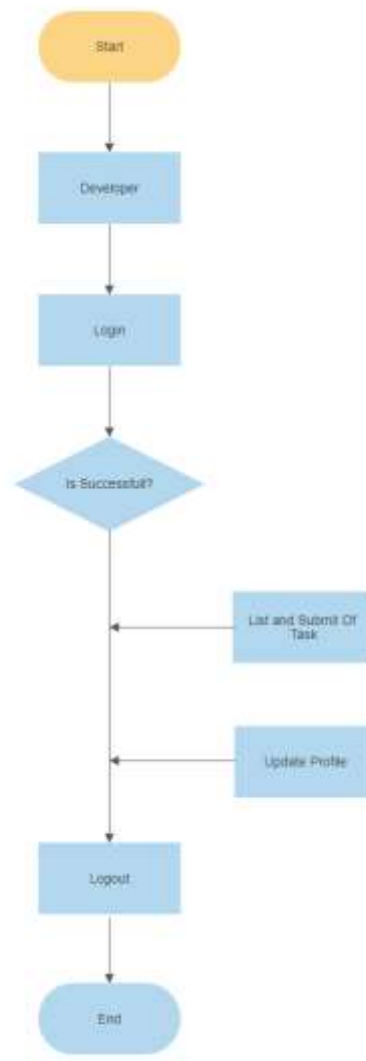
**Developer**

Figure 5.3.2.3 developer flow chart

## **Implementation**

### **6.1 Implementation Platform**

- Our project is suitable to all type of users like single and multi-users.
- Multi users are allowed to operate the website at the same time.
- We provide the interface which is user friendly.
- We have GUI (graphical user interface) by which all type of users can easily access the application.
- One user at a time and also multi users can access the website at the same time and use all the services.
- If we don't provide the GUI in the website then user won't like our website.
- For better performance and reliability, we have to include GUI in the website.
- So, for the more security and performance we have to use the GUI

### **6.2 Technology Specification**

#### **User Authentication**

- Identification and authentication are used to establish a user's identity.
- Each user is required to log in to the system.

#### **Password Protection**

- Every user who is to be allowed to access the portal is given his own email and password and given his own access rights so that only authorized and authenticated users can access the project.

#### **Confidentiality**

- We provide confidentiality to all the users.
- In that one user cannot access the data of the other users.
- For that we provide one key to each user to secure its data.

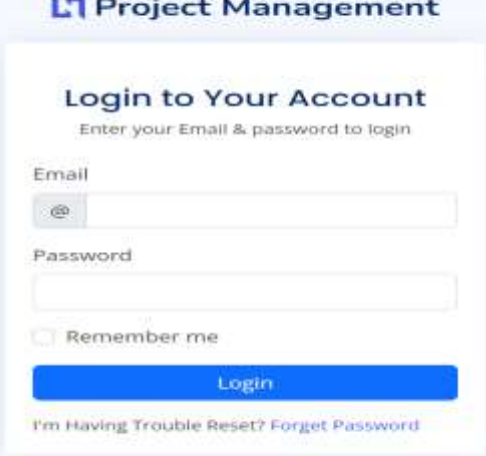
#### **Scalability**

- We provide the scalable website to make sure that every user can access the website in a proper order.

- User likes those type of website which are in one particular order that user cannot wait for the usage of the services.

## 6.3 Results


### Login



The image shows a login form for a system titled "Project Management". The form is titled "Login to Your Account" and includes the instruction "Enter your Email & password to login". It features two input fields: "Email" with an email icon and "Password". Below the password field is a checkbox labeled "Remember me". A blue "Login" button is positioned below the checkbox. At the bottom of the form, there is a link that reads "I'm Having Trouble Reset? Forget Password".

Figure 6.3.1 Login

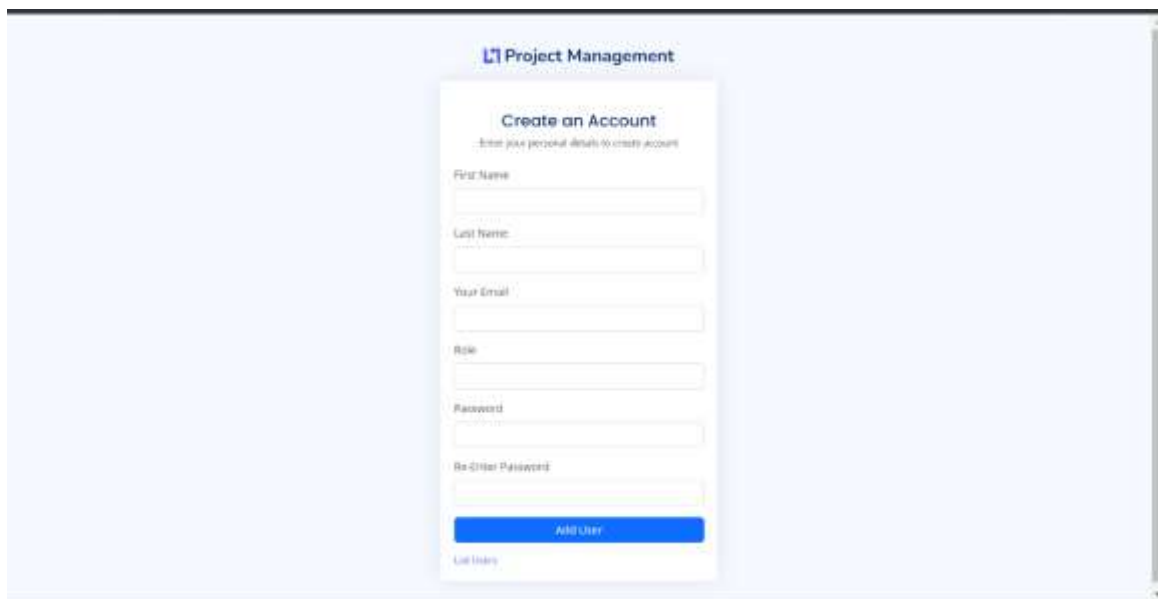
### Forgot Password



The image shows a "Forgot Password" form for the "Project Management" system. The form is titled "Forgot Password" and includes the instruction "Enter your Password". It features a single input field for "Email" with an email icon. Below the input field is a blue button labeled "Send OTP". At the bottom of the form, there is a link that reads "Back To Login Login".

Figure 6.3.2 Forgot Password

## Create User Account



The screenshot shows a web form titled "Project Management" with a sub-header "Create an Account". Below the sub-header is a prompt: "Enter your personal details to create account". The form contains the following fields: "First Name", "Last Name", "Your Email", "Role", "Password", and "Re-Enter Password". At the bottom of the form is a blue button labeled "Add User" and a link labeled "Go Index".

Figure 6.3.3 Create User Account

## Admin Dash Board

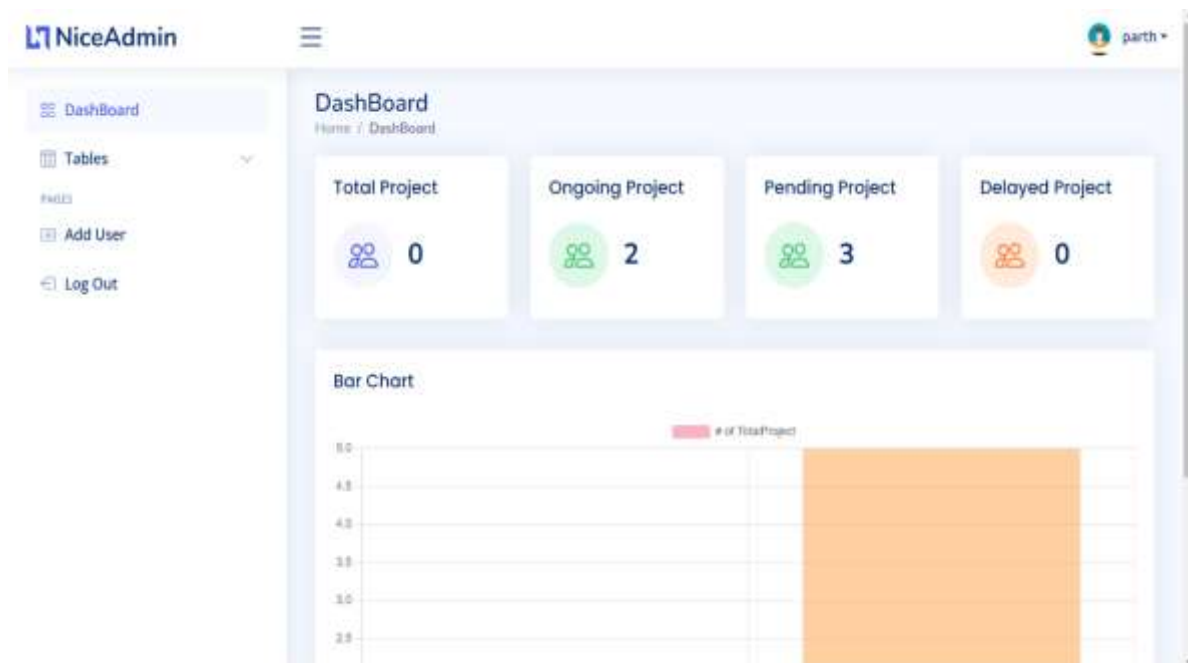


Figure 6.3.4 Admin Dash Board

## List Technology

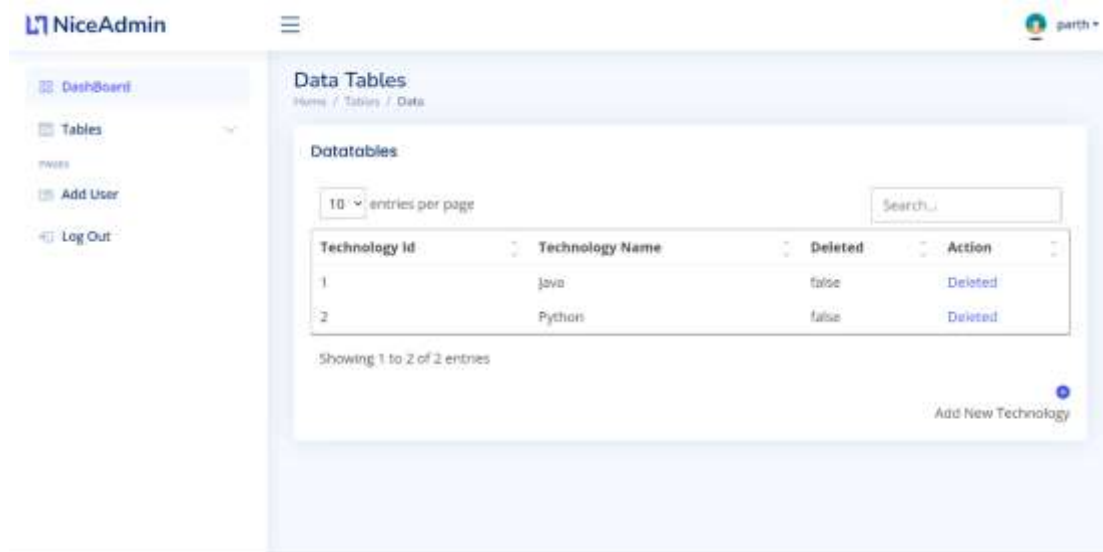


Figure 6.3.5 List Technology

## List Project

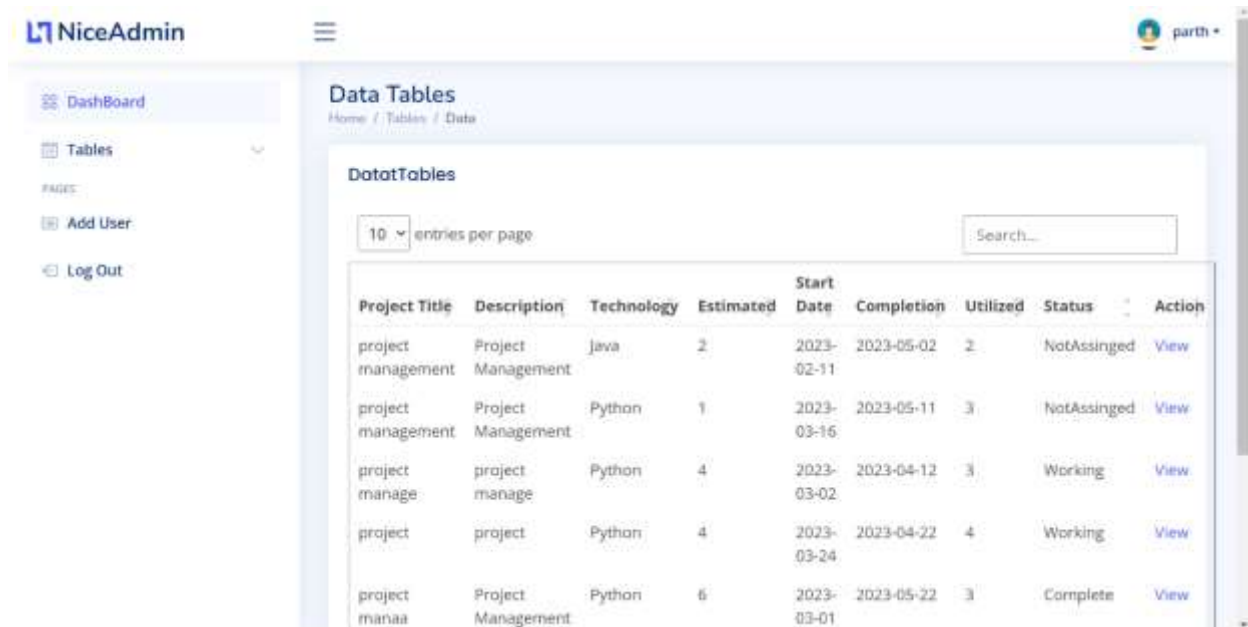


Figure 6.3.6 List Project

## View Project



Figure 6.3.7 View Project

## Add New Project

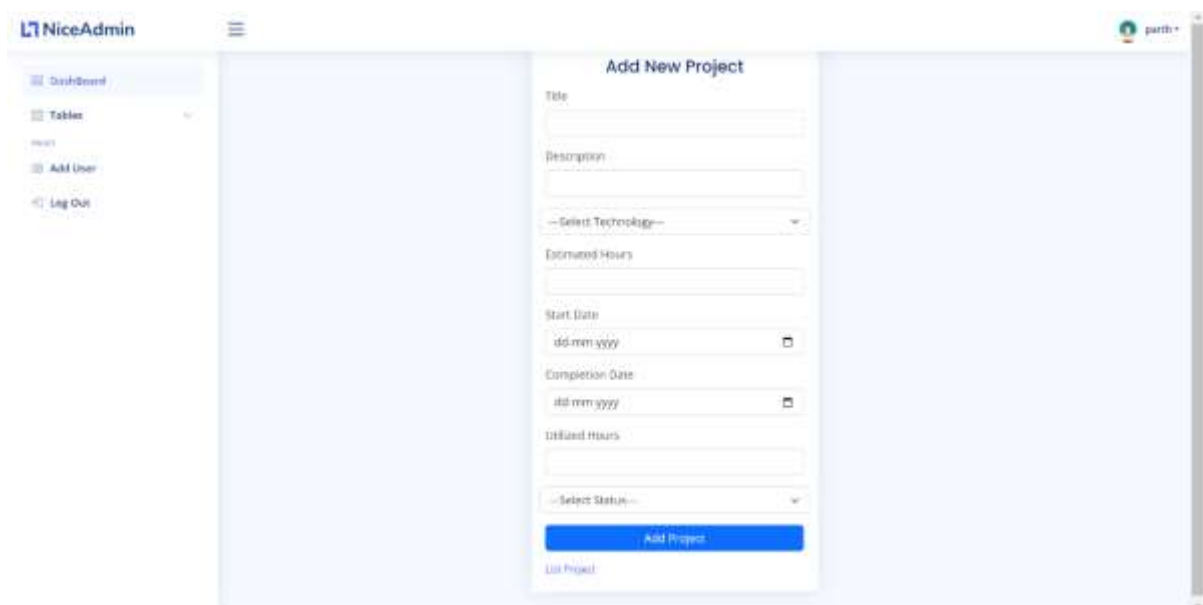
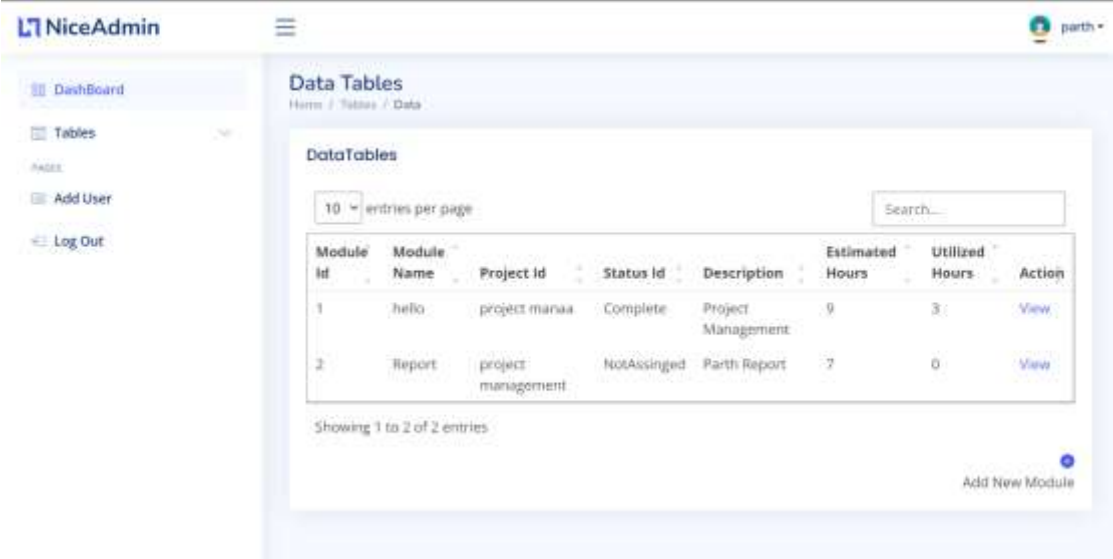




Figure 6.3.8 Add New Project

## List Module

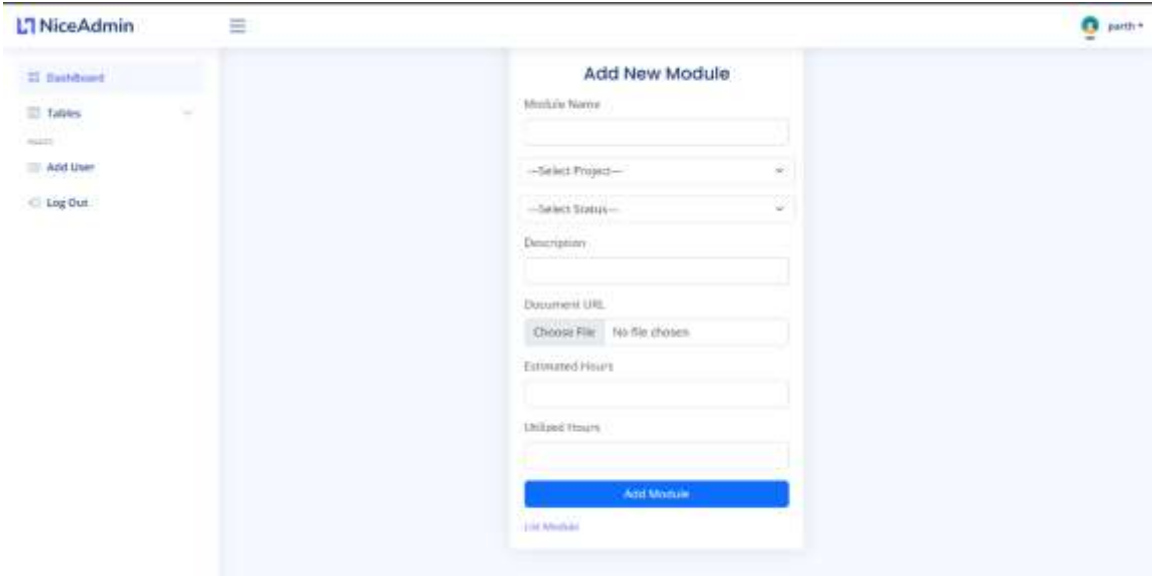


The screenshot shows the 'Data Tables' section of the NiceAdmin interface. It features a table with 8 columns: Module Id, Module Name, Project Id, Status Id, Description, Estimated Hours, Utilized Hours, and Action. There are two entries in the table. Below the table, it says 'Showing 1 to 2 of 2 entries' and there is an 'Add New Module' button.

Module Id	Module Name	Project Id	Status Id	Description	Estimated Hours	Utilized Hours	Action
1	hello	project manaa	Complete	Project Management	9	3	<a href="#">View</a>
2	Report	project management	NotAssigned	Parth Report	7	0	<a href="#">View</a>

Figure 6.3.9 List Module

## Add New Module



The screenshot shows the 'Add New Module' form. It includes fields for Module Name, a dropdown for Select Project, a dropdown for Select Status, a Description field, a Document URL field with a 'Choose File' button, and input fields for Estimated Hours and Utilized Hours. There is an 'Add Module' button at the bottom.

Figure 6.3.10 Add New Module

## List Users



**NiceAdmin**

parth

**Data Tables**  
Home / Tables / Data

**DataTables**

10 entries per page

Search...

First Name	Last Name	Email	Password	Role
parth	shah	parth@gmail.com	parth	1
hello	hi	hello@gmail.com	hi	2
parth	shah	parthparth915@gmail.com	pppp	2
james	bond	james@gmail.com	james	3

Showing 1 to 4 of 6 entries

Add New User

Figure 6.3.11 List Users

## List Task User



**NiceAdmin**

parth

**Data Tables**  
Home / Tables / Data

**DataTables**

10 entries per page

Search...

Task User Id	User Name	Task Name	Assign Status	Status	Utilized Hours
1	hello	project manage	1	Working	2

Showing 1 to 1 of 1 entries

Add New Task User

Figure 6.3.12 List Task User

## Profile Details

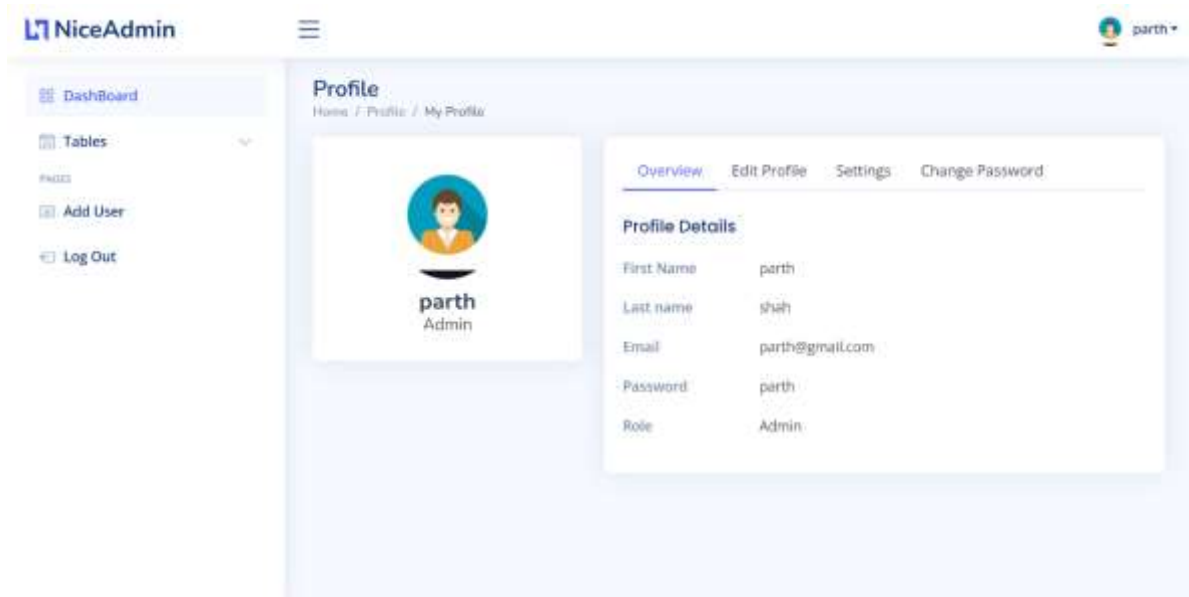


Figure 6.3.13 Profile Details

## Update Profile

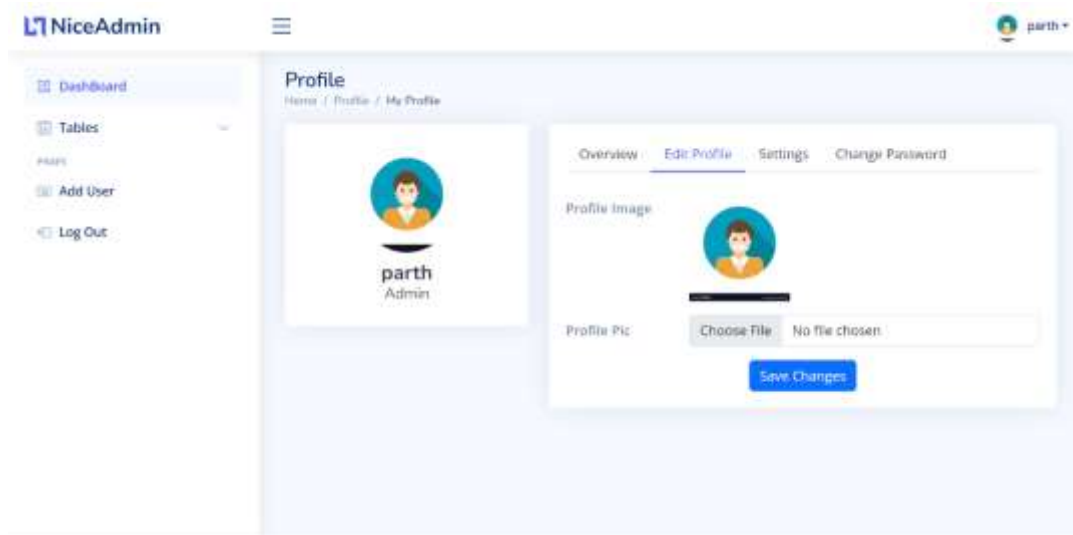


Figure 6.3.14 Update Profile

## Testing

### 7.1 Testing Plan/ Strategy

In this project we have done the manual testing to verify that all our functionality works properly or not. The testing process is carried out when we had completed the implementation of all the functionality. So here the testing had been done at the end of the internship.

In this project, we have done the functional testing that check each functionality works properly or not. All the testing procedure is carried out manually. All the testing procedure is carried out from 3<sup>rd</sup> April to 5<sup>th</sup> April.

First of all, we create the test cases for each functionality and what should be our expected output should be noted down. Then we check all the functionality and check the actual output and compare with expected output. If match then we can pass the test case else we have to give the remarks that what changes should have to be done.

## 7.2 Test Results and Analysis

### 7.2.1 Test Cases

Table 7.2.1 Test Case

Test ID	Test Condition	Expected Output	Actual Output	Remark
1	OPT Should be Sent after Email verify for forget password	Send the Email with OTP.	Perfectly Send the Email with OTP.	No
2	Customer Authentication Functionality	Login, Logout should be done properly.	Done Properly all the Authentication functionality.	No
3	CRUD operation of all the project, task, module and users.	Properly admin can perform a CRUD operation.	All the details should be saved properly.	No
4	Update profile	All the user can add and delete and update their profile.	All the function of the profile can be performed properly.	No

## **Conclusion and Discussion**

### **8.1 Overall Analysis of Internship**

During the internship first of all they gave the basic knowledge of our languages and then they gave the project. In project first of all we have to design the webpages according they have given as per the SRS (Software Requirements Specification) then we have to design the databases for our website. After designing the database, we have to integrate all the webpages with database and lastly, we have to do testing of our website. After completing the project, we have to upload the project to the GitHub.

### **8.2 Dates of Continuous Evaluation (CE-I and CE-II)**

- CE-1 27/02/2023
- CE-2 08/04/2023

### **8.3 Problem Encountered and Possible Solutions**

Sometimes the problem occurred that suppose two users tried to book the same service, same location and same time slot then in the database concurrency problem arises.

So, there would be possible solutions that in our algorithms we have to implement the synchronization methods so by implementing this method the concurrency issues solved.

Another problem that we have to enhanced the distance calculation between the developer and project manager by using the third-party libraries or APIs. As more efficient the calculation of distance more efficient would be assigned the developer and project manager properly.

## **8.4 Summary of Internship**

During Internship they have assign the project name Project Management. So, the Project Management is a platform where the Admin can perform all the CRUD operation in the project, module, users, and task. Admin can get all the report of the developer and project manager work in the project and given daily task.

## **8.5 Conclusion**

Overall, the project is successful in achieving its goals, providing users with a straightforward and intuitive way to manage their expenses. However, there are always areas for improvement, such as adding more advanced data analysis features, improving the user interface, and enhancing the user experience. The Project Management application project provides a strong foundation for managing Company Project and Task significant potential for future Project.

## **8.6 Limitation and Future Enhancement**

In our project the limitation that the developer cannot register them self to the users in the company. Developer cannot access the project information that not providing him and cannot change the project details.

## References

- <https://www.w3schools.com/html/>
- <https://javascript.info/>
- <https://getbootstrap.com/>
- <https://www.tutorialspoint.com/css/index.htm>









