EMAIL-PROJECT

BE-CE Semester- VIII

Prepared at

ONLINE PSB LOANS Limited

Ahmedabad

Prepared By

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(200320107056)

Guided By:

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Department of CE

LJIET, Ahmedabad

External Guide:

Dipak Vishvakarma

Online PSB Loans

Ahmedabad

SUBMITTED TO

L.J. Institute of Engineering & Technology

Gujarat Technological University

L.J Institute of Engineering and Technology

Ahmedabad

CERTIFICATE

This is to certify that the project report submitted along with the project entitled **Email-Project** has been carried out by **Patel Yash Kamleshbhai** under my guidance in partial fulfilment for the degree of Bachelor of Engineering in Computer Engineering, 8th Semester of Gujarat Technological University, Ahmadabad during the academic year 2023-24

Prof. Stephy Patel
Internal Guide

Prof. Shruti Raval
Head of the Department

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December 28th, 2023

Re: Internship Offer

Patel Yash Kamleshbhai

Dela Vas, Adiya,
Patan, Gujarat - 384255

Email Id-yashkp1126@gmail.com

Mob. No- 9327872161

Dear Yash,

Congratulations!

We are pleased to offer you a six-months internship program at our organization. Please find the details of the offer below:

- Position: Java Intern-IT
- Start Date: 08 January 2024
- End Date: 08 June 2024
- Workdays: Monday through Friday
- Working Hours: 10:00 am to 7:00pm
- Stipend: Rs.15,000/- per month.

Your final date of joining will be communicated to you soon.

During your internship, you may have access to confidential business information belonging to the company. By accepting this offer, you acknowledge that you must keep all this information strictly confidential and refrain from using it for your own purposes or from disclosing it to anyone outside the company.

Should you have any questions, please feel free to contact us in the HR department.

Yours Truly,

ONLINE PSB LOANS LIMITED

Authorized Signatory

L.J Institute of Engineering and Technology

Ahmedabad

DECLARATION

We hereby declare that the Internship report submitted along with the Internship entitled **Email-Project** submitted in partial fulfillment for the degree of Bachelor of Engineering in **Computer Engineering** to Gujarat Technological University, Ahmedabad, is a bonafide record of original project work carried out by me at **Online PSB Loans Limited, Ahmedabad** under the supervision of **Dipak Vishvakarma** 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	Sign of Student
Patel Yash Kamleshbhai	Y.K.Patel

ACKNOWLEDGEMENT

I wish to express our sincere gratitude to our External guide **Dipak Vishwakarma** for continuously guiding me at the company and answering all my doubts with patience. I would also like to thank my Internal Guide **Prof. Stephy Patel** for helping us through our internship by giving us the necessary suggestions and advices along with their valuable co-ordination in completing this internship.

I also thank our parents, friends and all the members of the family for their precious support and encouragement which they had provided in completion of our work. In addition to that, I would also like to mention the company personals who gave us the permission to use and experience the valuable resources required for the internship.

Thus, In conclusion to the above said, we once again thank the staff members of **Online PSB Loans Limited, Ahmedabad** for their valuable support in completion of the project.

With Sincere Regards

Yash Patel

ABSTRACT

This Internship report delves into the realm of sustainable business practices, offering a comprehensive analysis of my experiences and insights gained during my internship at **Online PSB Loans Limited, Ahmedabad** Through immersive involvement in various projects and tasks, this report elucidates the practical applications and challenges associated with implementing sustainability initiatives within a corporate setting. Overall, this internship has been a rewarding experience, allowing me to apply theoretical knowledge gained from academic studies to real-world scenarios. The lessons learned and experiences gained during this internship will undoubtedly serve as a foundation for my future endeavors in the professional world.

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1. OVERVIEW OF THE COMPANY

1.1 HISTORY

- psbloansin59minutes.com is a new-age digital lending platform.
- The platform has been developed with an objective to provide advanced technology-based financial innovations and solutions
- PSB59 platform was born from the insight that MSMEs found it hard to avail loans from formal banking channels due to the tedious application, documentation and verification processes.
- Powered by rigorous innovation and technological advancements, we're proud to be recognized as india's largest lending platform (by credit suisse in march 2019).
- We passionately serve our customers with cutting-edge financial products and strive to help them pursue their dreams.
- The platform integrates advanced technologies like AI and ML to automate and digitize the lending processes for borrowers and lenders.

1.2 DIFFERENT PRODUCT / SCOPE OF WORK

- MSME Loan
- Mudra Loan
- Personal Loan
- Auto Loan
- MSME loans (micro, small and medium enterprises) micro, small and medium enterprises (MSME), which play a crucial role in the socioeconomic development of india, often face huge challenges when it comes to timely funding.
- PSB59 makes the lives of MSMEs easier by not only helping raise funds for various business requirements quickly, but also simplifying the decision-making process for credit managers.
- Mudra Loan Avail Term Loan/Working Capital on easy terms Get Mudra & Give Wings to your Business. whose credit needs are below ₹10 Lakh.

- **Product Testing**

Adhering to standards of Quality Assurance, PSB Loans abide by strict quality analysis from Validation, Functional, Performance, QA and UAT testing to assure the developed product is stable, scalable and secure. PSB LOANS expert QA team ensures our developed software products are easily customization, resilient, and integratable at all levels.

1.3 ORGANIZATION CHART

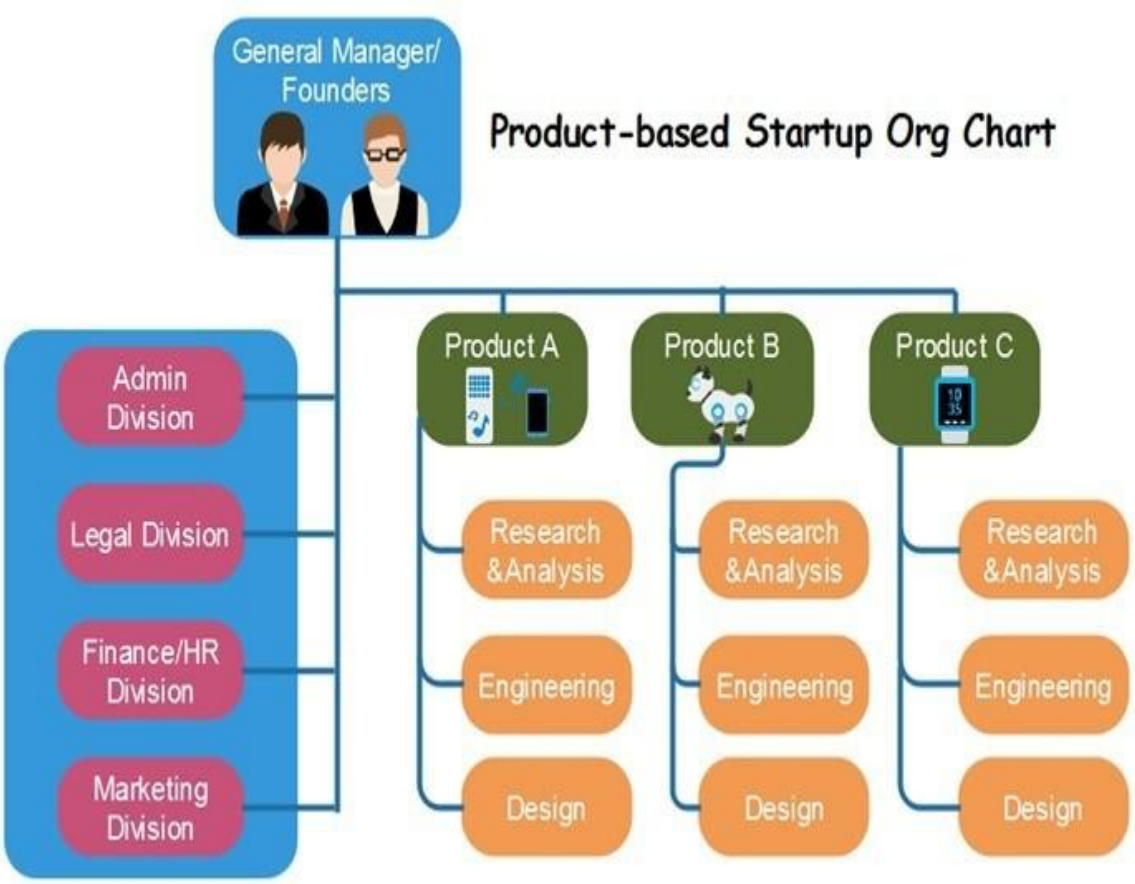

Fig. 1.1 Organization chart

1.4 CAPACITY OF PLANT

There are around 250 employees are working in this well known organization. In addition, they are actively hiring more employees and interns for future progress of company.

Awards :

- ISO 27001:2013
- One of the 10 best start-ups in financial services category in 2019 by silicon india
- Enterprise of the year fintech leader by times group – 2019
- Emerging fintech by governance now BFSI 2019
- IDRBT winner 2017
- India fintech awards top 20 (2017)
- Recognized as india's largest online lending fintech platform by credit suisse in march 2019
- Technoviti award from banking frontiers in february 2020
- Times CSR awards
- 2021 gujarat for psbloansin59minutes.com
- Best financial innovation psbloansin59minutes.com
- DOD (drivers of digital) awards 2021

2. OVERVIEW OF DIFFERENT PLANT/DEPARTMENT

2.1 DEPARTMENTS

- **Information Technology**

  Department It is the department where all the magic happens, where the ideas are coming into existence.

- **Human Resource Department**

  This is the department which makes the environment of the company cheerful and keeps records of attendance and run hiring operations as well.

- **Legal Department**

  It's where all the legalization and paperwork of the company's products and services.

- **Product Department**

  The team understand the client behavior and designs the specific products according to the market and client's needs. The consumer satisfaction is the key working principle of this department.

1) Backend

- -Spring boot, Java, Node Js, Python this type of language is use in this department which is explain in details to below

  - **Java**

    - Java is a programming language and a platform. Java is a high level, robust, object-oriented and secure programming language.

    - Java was developed by Sun Microsystems (which is now the subsidiary of Oracle) in the year 1995.

    - James Gosling is known as the father of Java. Before Java, its name was Oak. Since Oak was already a registered company, so James Gosling and his team changed the name from Oak to Java.

- **Spring boot**

  - Spring Boot provides a good platform for Java developers to develop a stand- alone and production-grade spring application that you can just run.

  - You can get started with minimum configurations without the need for an entire Spring configuration setup.

  - It provides a flexible way to configure Java Beans, XML configurations, and Database Transactions.

  - It provides a powerful batch processing and manages REST endpoints.

  - In Spring Boot, everything is auto configured; no manual configurations are needed.

  - It offers annotation-based spring application

2) Frontend

- Angular, ReactJS is used in this department which is explain in details to the below

- **Angular**

  - Angular is an open-source, JavaScript framework written in TypeScript.

  - Google maintains it, and its primary purpose is to develop single-page applications.

  - As a framework, Angular has clear advantages while also providing a standard structure for developers to work with.

  - It enables users to create large applications in a maintainable manner.

2.2 EQUIPMENT USED IN DEPARTMENT.

1) Front-end

- Angular
- JavaScript
- Angular Material
- Bootstrap
- HTML
- CSS

2) Back-end

- Spring Boot

3) Database

- MySql
- Oracle

- **Major Equipment (For Department)**

- Operating System : Windows 10 & 11
- CPU/Processor : 64bit x86 quad core
- Ram : 8GB

- **Major Tool (For Department)**

- Spring Tool Suite
- Visual studio Code
- SQL Yog
- MySQL Workbench
- EclipseIDE
- Putty
- WinSCP
- GitHub
- Git

2.3 PREPARE SCHEMATIC LAYOUT WHICH SHOWS THE SEQUENCE OF OPERATION FOR MANUFACTURING OF END PRODUCT.

The production is carried out in following steps

- Discover
- Strategies
- Execute
- Launch
- Evolve
- How to Engage

- **Explain in details about each stage of production.**

- **Step-1:- Discover**

Our goal is to fully understand each client`s business and the environment in which it operates. We look to completely understand the target audience and how they Will interact with the digital products we deliver.

- **Step-2:- Strategies**

Our planning process turns research into a clear set of action items to meet business goals. We take this information to build the blueprint to drive more traffic and convert web visitors into web leads.

Step-3:- Launch

• During the Implementation, our job is to translate creative into a full program that goes live. Implementation often includes an array of services, which can include design, development and search marketing.

• **Step-4:- Evolve**

• Last but not least, our task is to use scientific metrics to track and analyze campaign performance. This helps us easily identify what worked and what did not, we then initiate new strategies to maximize your business goals.

• **Step-5:- How to Engage**

- Constrained Budget Engagement :

  ➢ Very clear scope and stable set of requirements that isn't likely to change throughout the project.

  ➢ Can define clear long-term milestones - irrespective of the working models chosen (i.e., Agile or Waterfall).

- Constrained Budget Engagement :

  ➢ The Scope is defined very briefly and the requirements are very likely to change throughout the project.

  ➢ Can define clear short-term milestones - depending on the working model chosen (i.e.,Agile or Waterfall).

3. INTRODUCTION TO INTERNSHIP

3.1 INTERNSHIP SUMMARY

It is a 6-month internship and as part of the internship I have to develop one project which name is Email Project. This Project is based on Online Email Project. In this Project User can register through Register page and after register login page will open. Users can Interact or Message throw internet using this Mail Interface.

3.2 PURPOSE

As a Subject of 8th semester, I have done this internship the purpose behind that is to know how to actual work In company and get experience as a developer which is useful in future.

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3.3 OBJECTIVE

To work as a Full Stack Web Developer applying my knowledge in the field of development, cater to the specific needs of the people.

3.4 TECHNOLOGY

As a part of this Internship, I have learn and work with following Technologies.

- **HTML**: HTML would be used to create the structure and layout of the UI elements that allow the user to interact with the app and generate a floor plan.

- **CSS**: The CSS code can define the style rules for the HTML elements and it is an important tool for creating visually appealing and user-friendly web apps.

- **Angular**: Angular is one of the frontend frameworks available in the space, it makes developer work easy by having all the things combined inside one framework. Angular CLI is one of the helpful tools to simplify the process.

- **Bootstrap**: Bootstrap is the styling framework, which provides ready to use CSS classes, which makes the hurdle of frontend development easy.

- **TypeScript**: TypeScript is a superset of JavaScript that adds optional static typing and other features to the language. It is helpful in Angular and frontend development as it provides better code readability, enables faster debugging, and reduces development errors. TypeScript also allows for better code organization and helps developers catch errors before the code is executed.

- **Spring-boot**: Spring Boot is a Java-based framework that simplifies web application development. It provides auto-configuration options and tools that enable fast and easy project setup, reducing development time.

3.5 Internship/Project Planning

For a successful software project. The following steps can be followed:

1. **Iterative Development**: The agile development approach involves iterative development, where the project is broken down into smaller, manageable components. The role-based authentication system can be developed incrementally, starting with the core functionalities and gradually adding features and improvements over time.

2. **Collaboration**: The agile development approach emphasizes collaboration between different teams, including developers, designers, testers, and project managers. The role-based authentication system involves both backend and frontend development teams, making collaboration and communication essential for the project's success.

3. **Flexibility**: The agile development approach provides flexibility in responding to changing requirements and priorities. The role-based authentication system may require adjustments or modifications during the development process, and the agile approach allows for these changes to be made without disrupting the project's progress.

4. **Continuous Integration and Testing**: The agile development approach emphasizes continuous integration and testing, ensuring that the project is tested

regularly to identify and fix issues. The role-based authentication system requires rigorous testing to ensure that it is secure and efficient, and the agile approach allows for continuous testing throughout the development process.

5. **Stakeholder Involvement**: The agile development approach involves stakeholders in the development process, ensuring that their feedback and requirements are taken into account. The role-based authentication system is developed to meet specific business requirements, and involving stakeholders in the development process ensures that their needs are met.

3.6 INTERNSHIP SCHEDULING

The plan -chart explains the tasks versus the time (in weeks) they will take to complete.

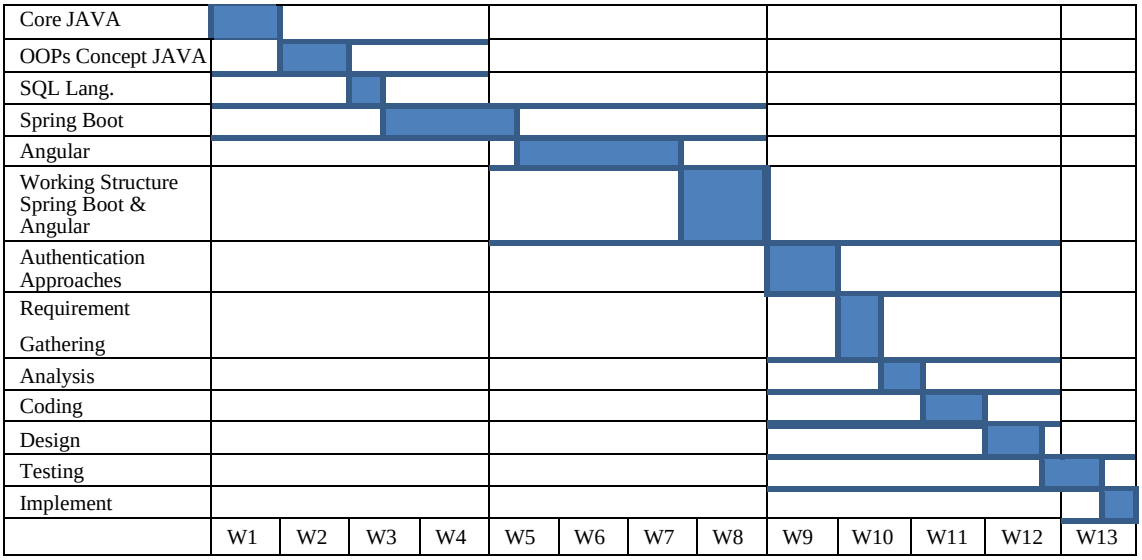


Fig. 3.1 Internship Scheduling

4. SYSTEM ANALYSIS

4.1 STUDY OF CURRENT SYSTEM

4.1.1 Study of Current System - Use Case Diagram

All of us have access to the internet and we use it for many different things like researching for some information for school and college projects, downloading music, pictures, wallpapers, and screen-savers, to get updates on the latest happenings all over the world, emails, instant messaging, chats, and many other things. But do you know there is one more advantage of the internet, and that is learning? Yes! You can educate yourself in the comfort of your own home and get a degree through the internet now. With the latest technology, even the impossible seems possible now.

- You are able to link the various resources in several varying formats.
- It is a very efficient way of delivering courses online.
- Due to its convenience and flexibility, the resources are available from anywhere and at any time.
- Everyone, who are part time students or are working full time, can take advantage of web-based learning.

4.2 PROBLEM AND WEAKNESSES OF CURRENT SYSTEM

Expenditure on education – More funds should be allotted for the development of the education system in India. In the past few years, many beneficial steps have been taken in this direction and if the same is continued India may soon be overcome the current challenges.

Student-teacher ratio – The number of students in search of proper education is way more in comparison to the teachers and faculty available. Thus, qualified teachers must be appointed to impart knowledge to the future of the country

Capacity utilization – The world now needs creative minds and the Government must encourage schools to boost the students and utilize their capacities to the max and not let their ideas go unheard.

4.3 REQUIREMENTS OF NEW SYSTEM

There is major two type of requirements in new system which is mention below

1) Hardware Requirements

2) Software Requirements

4.3.1 Hardware Requirements

- Intel core –I5 Processor 550 MHz or Above
- Minimum 250 GB Hard disk
- Minimum 4 GB RAM
- Mouse, Keyboard

4.3.2 Software Requirements

- Windows 7,8,10,11
- Mozilla Firefox latest version, Chrome latest version
- VS Code, Visual Studio 2019 or above

4.4 SYSTEM FEASIBILITY

The project has no major technical challenge and is considered to be technically feasible. A potential challenge is one of an institutional and administrative feasibility. The project is essentially an educational project and ideally the issues addressed should be dealt with by the Ministry of Education, Youth and Culture through its normal programs. However, in light of general budgetary constraint of the Government, that is not possible at this time.

To ensure project success, a project structure is proposed whereby a limited liability company will be formed to implement the project. This entity will benefit from having the singleness of purpose and possession of required resources to implement the project. In light of these measures the project is considered to be quite administratively and institutionally feasible.

4.5 PROCESS IN NEW SYSTEM

Student can sign up themselves and after login they can able to purchase the course and able To see the study videos.

The videos are one of the amazing go-to resources that can be viewed anytime and from anywhere. If students have access to the internet, then they can watch and learn from a multitude of devices such as smartphones, tablets, and laptops.

4.6 FEATURES OF NEW SYSTEM

- Implement Virtual Reality (VR)
- A Team Of Competent And Skilled Teachers
- Engaging Sensory Experience
- High-Quality Student-Tutor Interactions

4.7 LIST MAIN MODULES OF NEW SYSTEM

- Student Module: Used for purchased course.
- Teacher Module: Used for managing the chapters/subjects details.
- Admin Module: Used for managing all the details.

4.8 TECHNOLOGY

- I have used given below technology
  - Frontend : Angular (HTML, CSS, Bootstrap, Typescript)
  - Backend : Spring boot (Java)
  - Database : MySql

5. SYSTEM DESIGN

5.1 SYSTEM DESIGN & METHODOLOGY

5.1.1 Flow chart

5.1.1.1 User Login

Here is the flow chart of user login system to use the app.

User need to fill valid value , If not then user not able to reach the app.

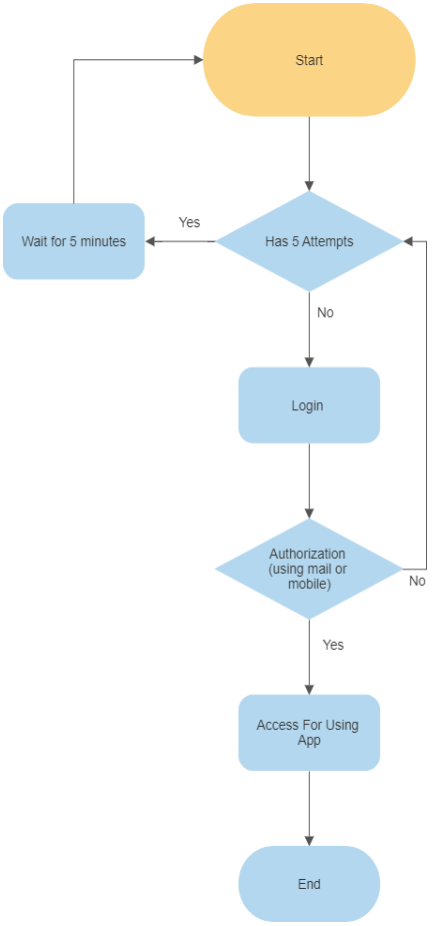


Fig. 5.1 User Login

5.1.1.2 User Signup

Here is the flow chart of user sign up system .

All information of user must be some unique content which is base of user authentication process.

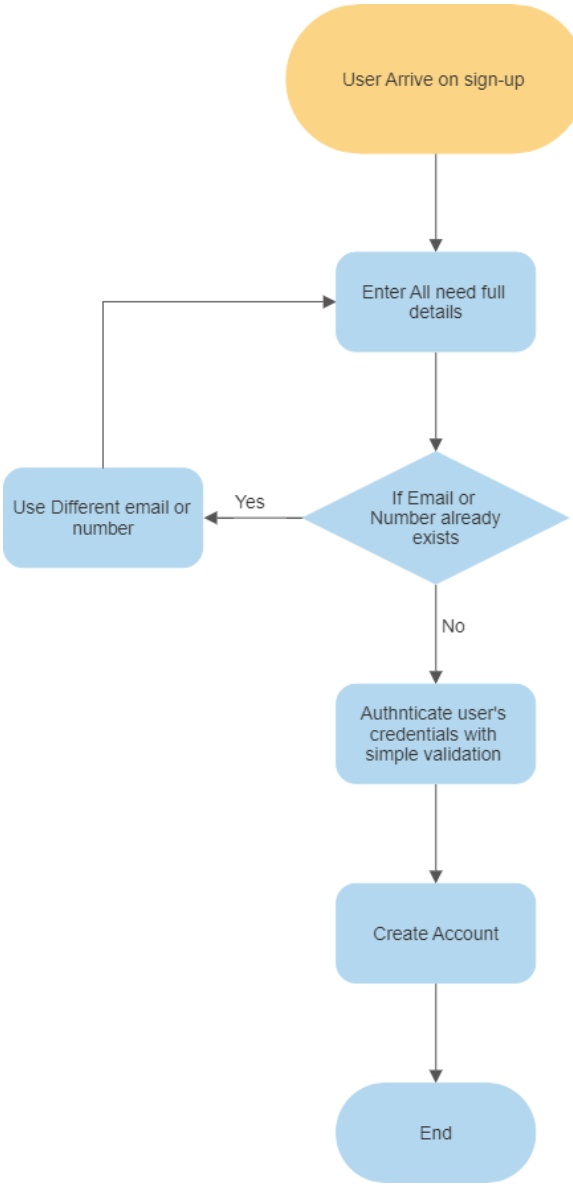


Fig. 5.2 User Signup

5.1.1.3 User Forgot Password

Here is the flow chart of ‘working of forgot password scenario.

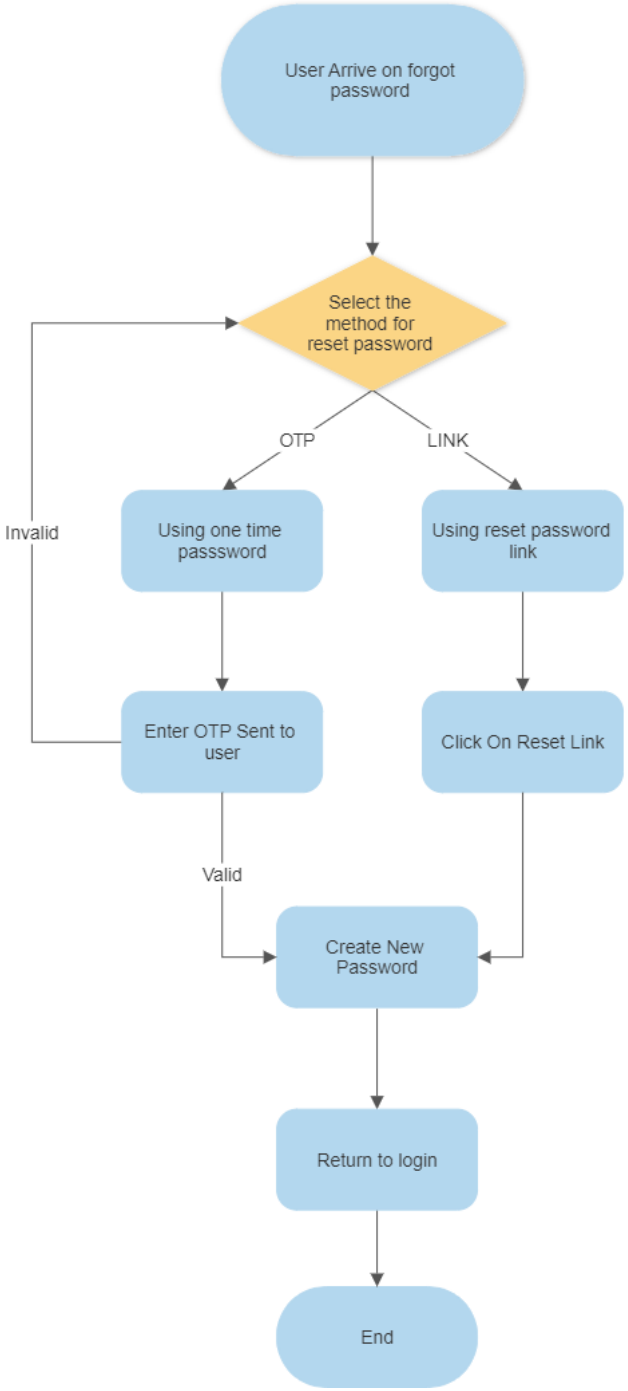


Fig. 5.3 User Forgot Password

5.2 DATABASE DESIGN

Field Name	Datatype	Constraints	Description
id	INT	Primary key	Stores unique id for User
email	VARCHAR(255)	Not null	Stores Email of User
last_logged	VARCHAR(255)	Not null	Stores Last Logged Date of User
mobile	BIGINT	Not null	Stores Mobile No. of User
name	VARCHAR(255)	Not null	Stores Name of User
otp	INT	Not null	Stores OTP of User
password	VARCHAR(255)	Not null	Stores Password of User

Fig. 5.4 User Database Design

Field NameD	Data Type	Constraints	Description
id	INT	Primary key	It stores unique id of table
date	DATE	Not Null	It stores Date Email was Send
message	VARCHAR(255)	Not Null	It stores Message of Email
readed	BIT(1)	Not Null	It stores Readed of Email
receiver_email	VARCHAR(255)	Not Null	It stores Receiver's Email Id of Email
receiver_name	VARCHAR(255)	Not Null	It stores Receiver's Name of Email
sender_email	VARCHAR(255)	Not Null	It stores Sender's Email Id of Email
sender_name	VARCHAR(255)	Not Null	It stores Sender's Name of the Email
subject	VARCHAR(255)	Not Null	It stores Subject of Email

Fig. 5.5 Email Database Design

Field Name	Datatype	Constraints	Description
id	INT	Primary key	It stores unique draft id
message	VARCHAR(255)	Foreign key	It stores Message of Draft
receiver_email	VARCHAR(255)	Not Null	It stores Receiver's Email Id for Draft
subject	VARCHAR(255)	Not Null	It stores Subject of Draft

Fig. 5.6 Draft Database Design

6. IMPLEMENTATION

6.1 IMPLEMENTATION PLATFORM

6.1.1 Frontend

- Visual Studio Code
- Sublime Text
- Spring Tool Suite

6.1.2 Backend

- Spring Tool Suite
- PostMan

6.1.3 Database

- MySql Workbench
- PostgreSQL

6.2 MODULE SPECIFICATION

Major modules of this project are as following

- Login
- Registration
- Forget Password
- Profile
- Compose
- Inbox Emails
- Sended Emails
- Draft Emails
- LogOut

6.3 RESULTS

I have attached screenshots of above-mentioned modules in following pages.

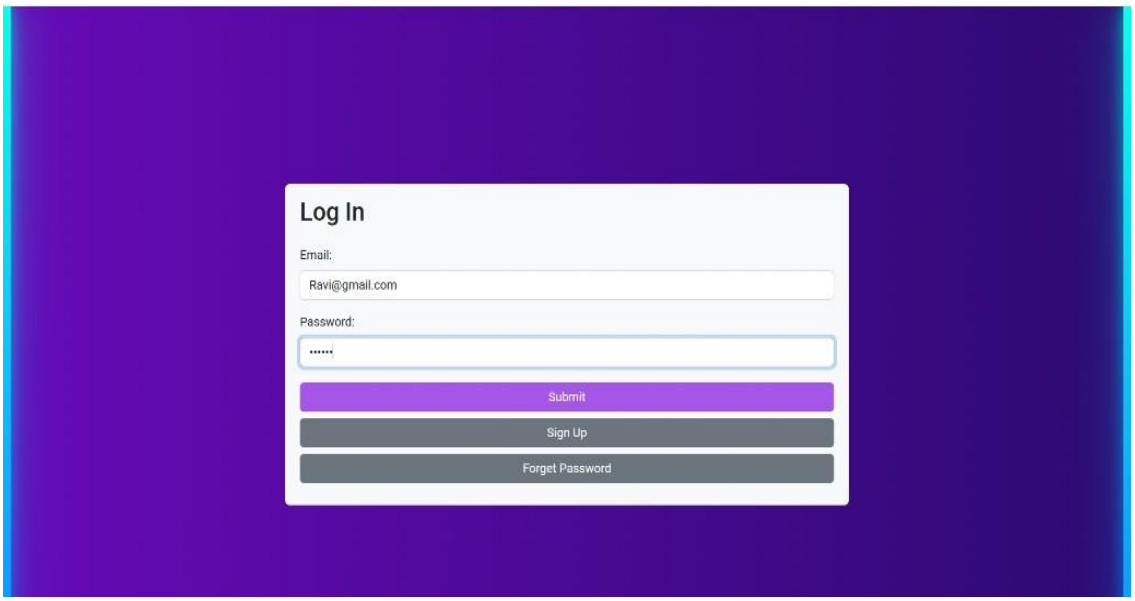


Fig. 6.1 Login Page

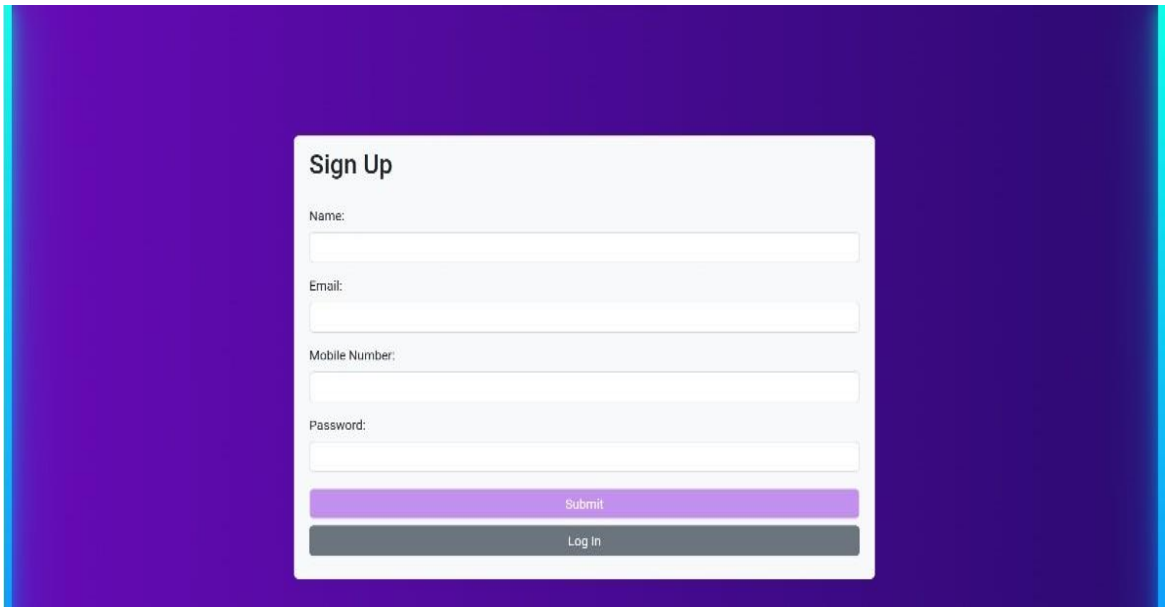


Fig. 6.2 Sign Up Page

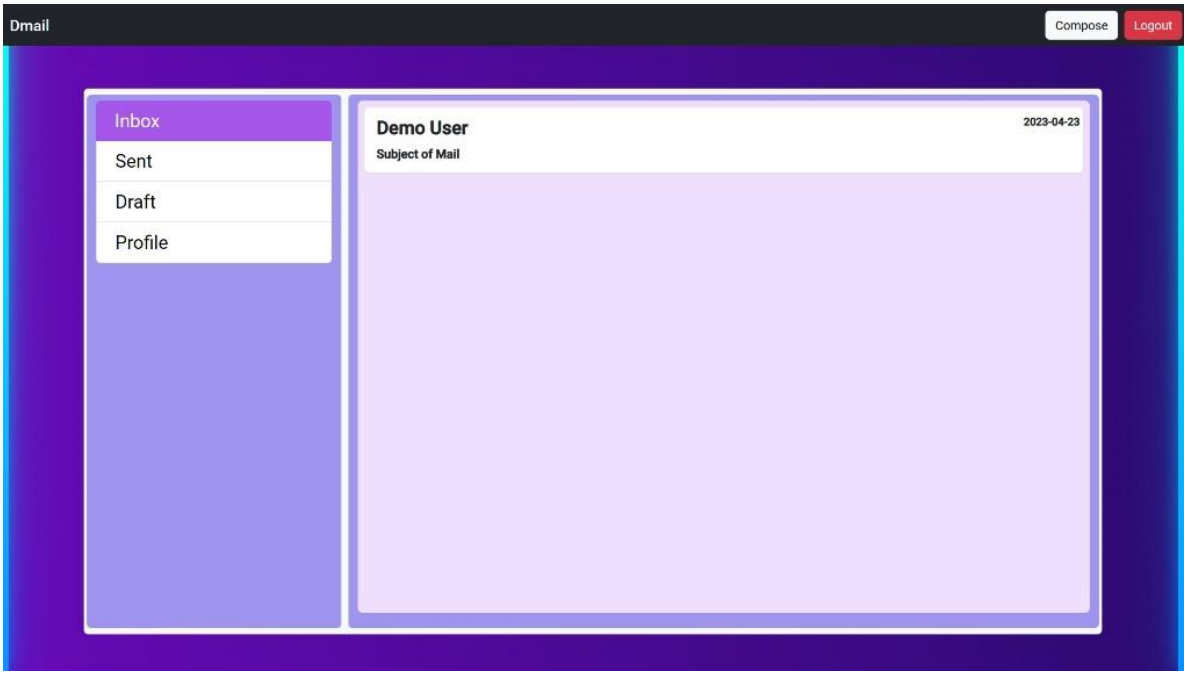


Fig. 6.3 Inbox Emails

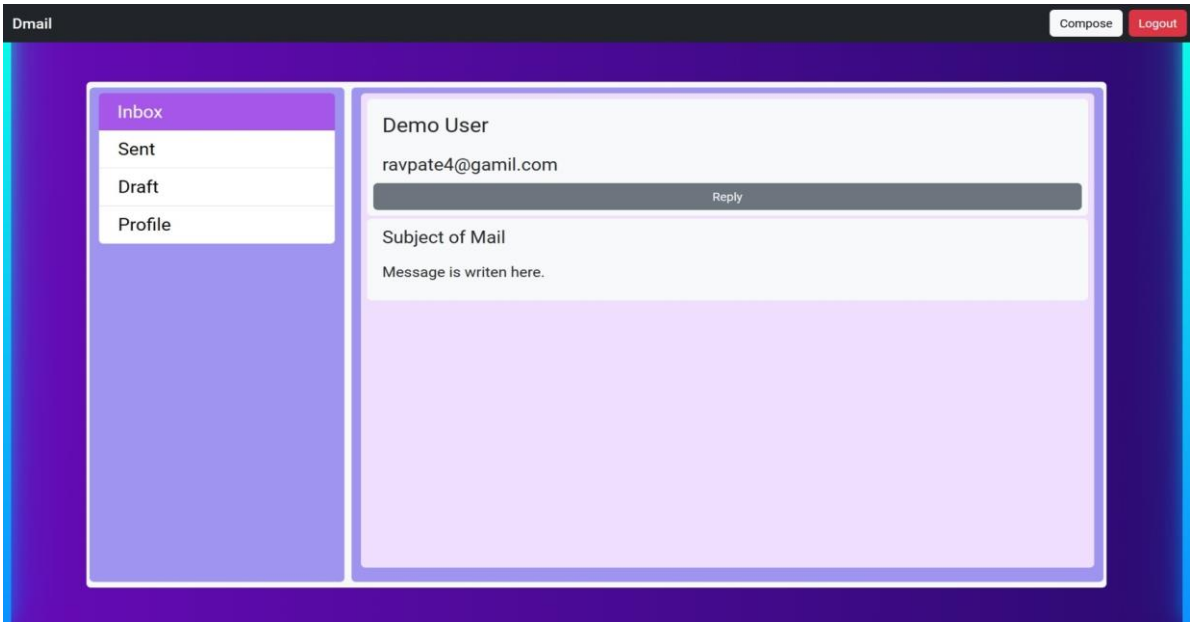


Fig. 6.4 Opened Email

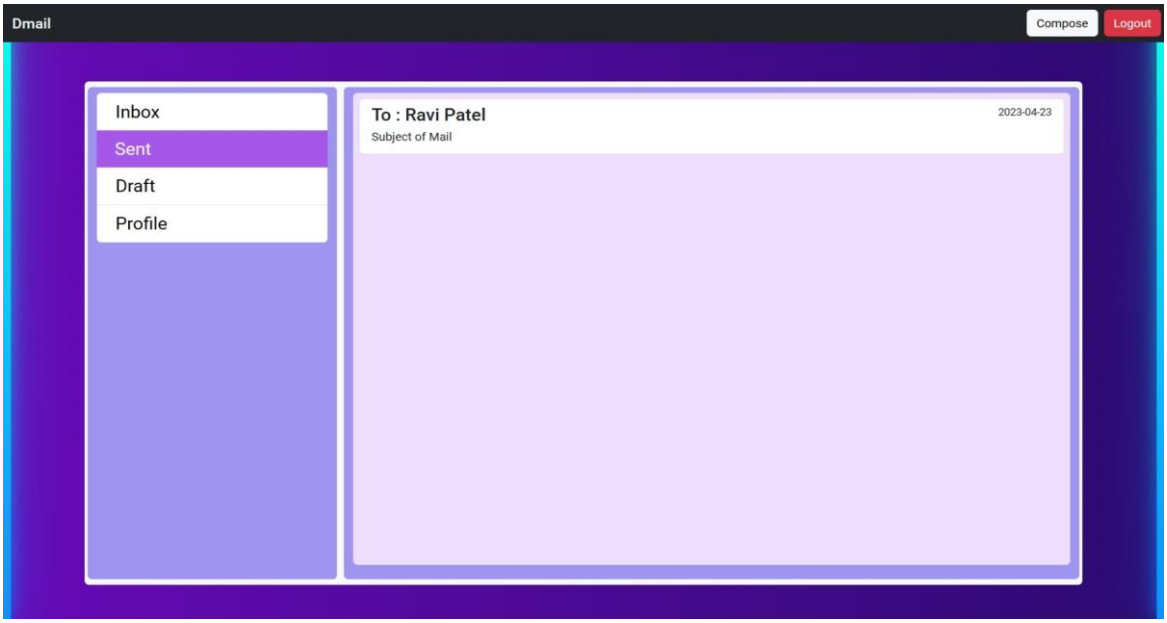


Fig. 6.5 Sended Emails Dashboard

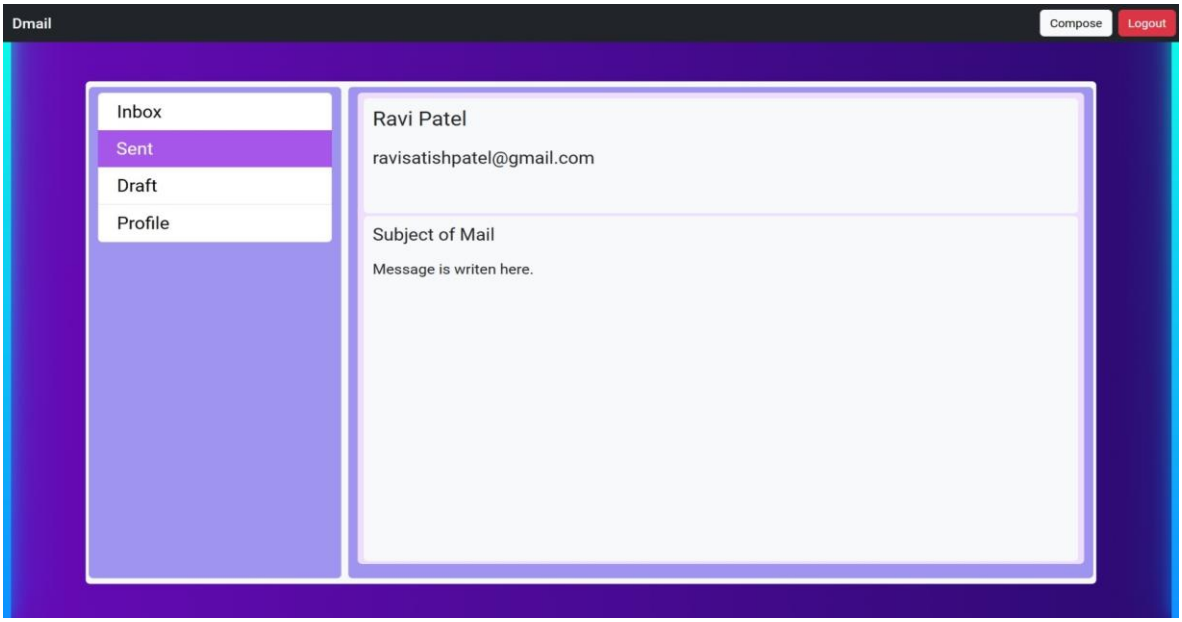


Fig. 6.6 Sended Email

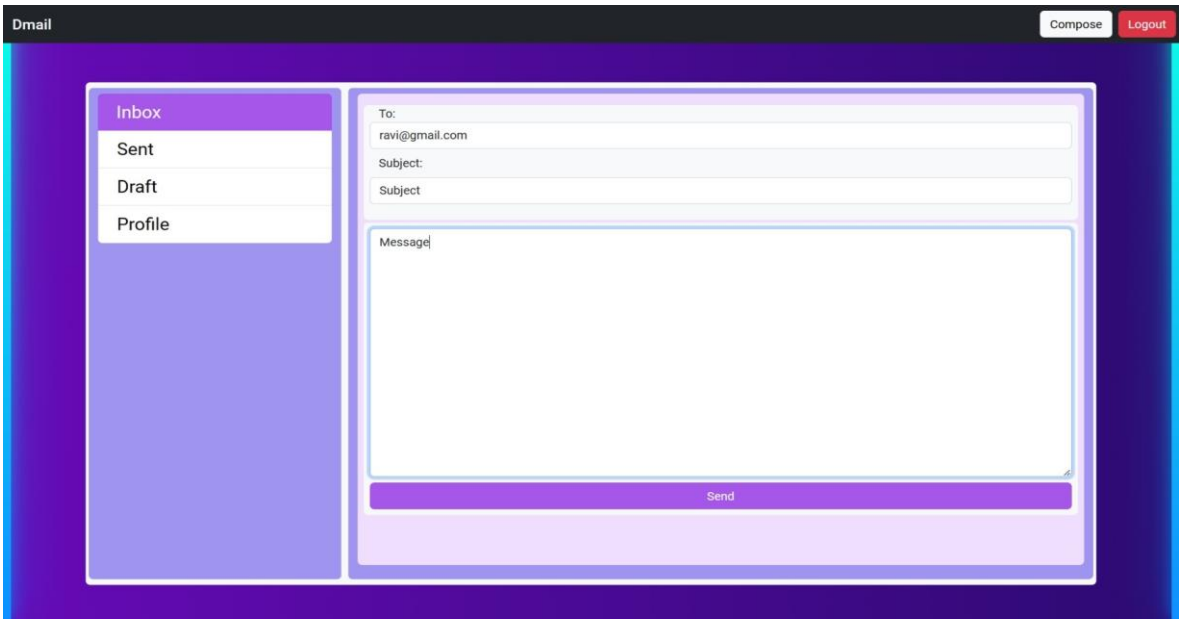


Fig. 6.7 Compose Emails

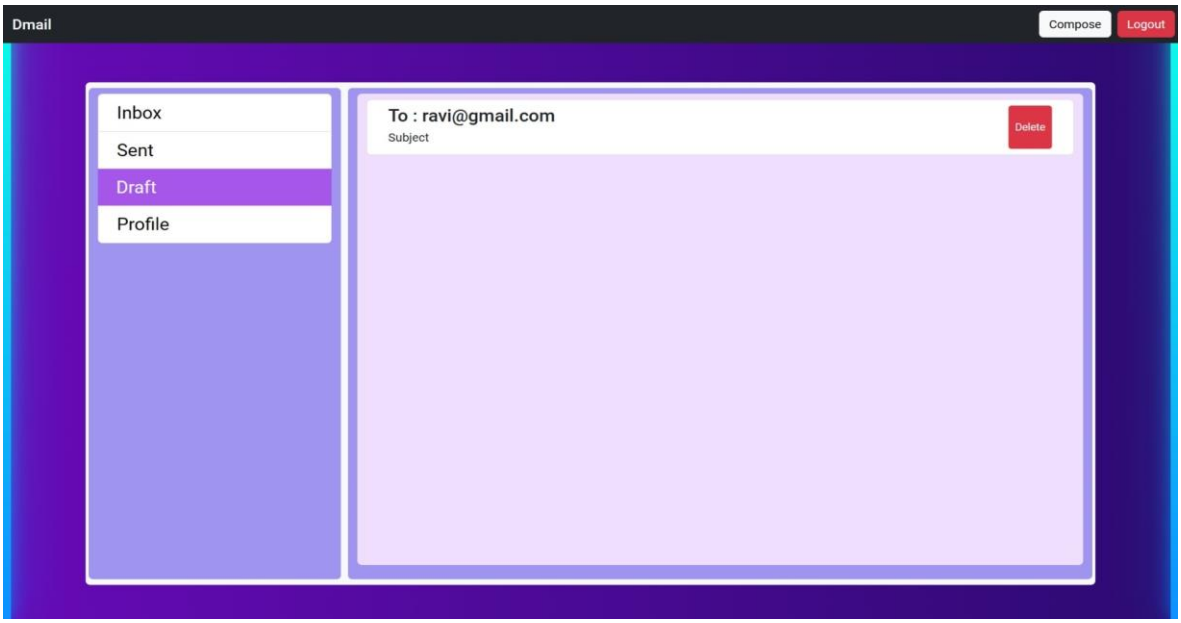


Fig. 6.8 Draft Emails

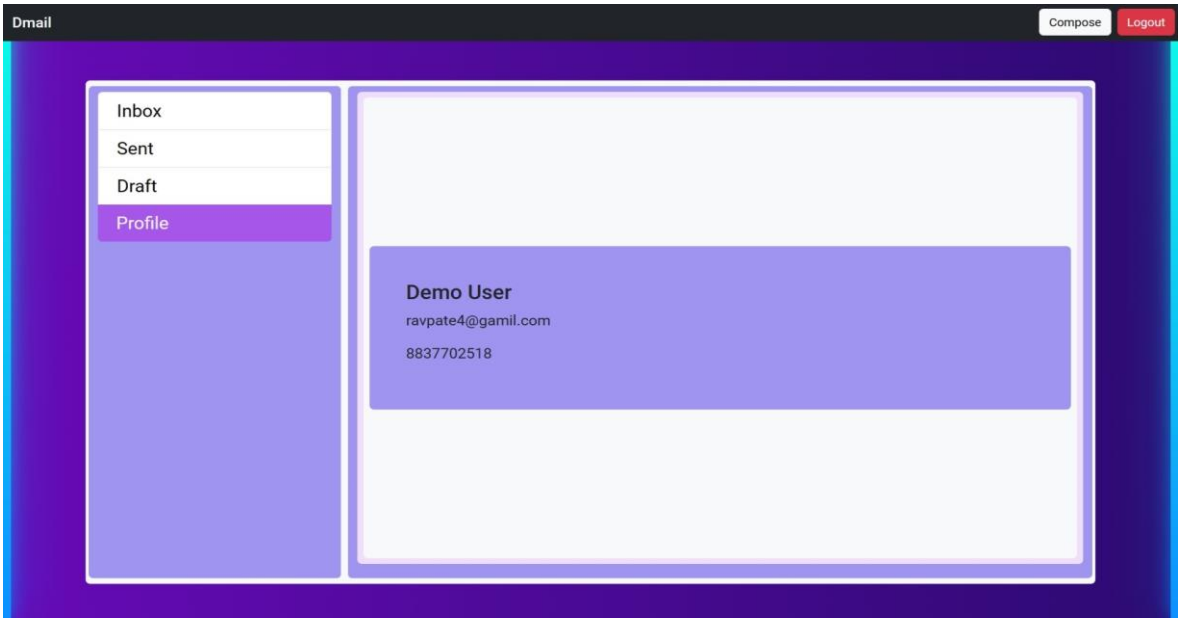


Fig. 6.9 Profile Page

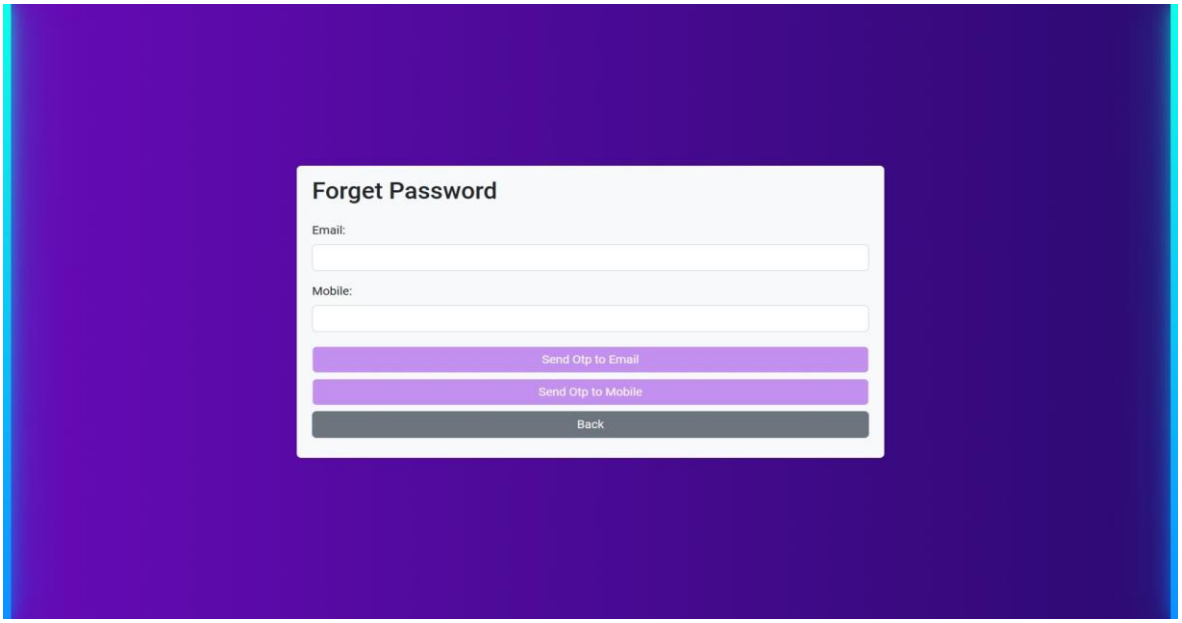


Fig. 6.10 Forget Password Page

7. TESTING

7.1 TEST PLAN/ STRATEGY

7.1.1 Test Plan

- **Testing Types**

  Unit Testing :

  The main objective of unit testing is to isolate written code to test and determine if it works as intended.

  Integration Testing :

  it focuses on checking data communication among these modules.

- **The Testing Process**

  Developer tests the software process activity such as design, implementation and the requirement engineering.

  Because, design errors are very costly to repair when the system has been started to operate.

  Therefore, it is quite obvious to repair them at early stage of the system. So, analysis is the most important process of any project.

- **Requirements Tractability**

  As most interested portion is whether the system is meeting its requirements or not, for that testing should be planned so that all requirements are individually tested.

  Develop checked the output of certain combinations of input, which gives desirable results, or not.

  Strictly stick to our requirements specifications, give you the path to get desirable results from the system.

- **Tested Items**

My tested items are as following,

- All working related signup and sign in working properly.
- Email and sms API are third party APIs also working * .

7.2 TEST RESULTS & ANALYSIS

7.2.1 Test Cases

7.2.1.1 Case-I

- **Test name:** login & registration Form Fill up

- **Purpose**
  - Input Box: Checking the functionality of the inputboxes. Which can accept “Alphabets, Numeric, Special characters"
  - Submit Button: Checking the functionality of the “Register / login / Submit / Cancel” push button.

- **Pre-Condition**
  - as per different user, emails are show different then google’s gmail functionality.

8. CONCLUSION & DISCUSSION

8.1 OVERALL ANALYSIS OF INTERNSHIP

- As a full stack developer intern, I have gained a lot of knowledge in full stack web development.
- I have likely gained experience with front-end development frameworks such as Angular, and back-end technologies like Spring Boot.
- I have also likely worked with databases such as MySQL and Oracle.
- Also with this knowledge , I also learn how to work with team , I also gain knowledge from my office colleagues on different topics.
- Overall, the internship has provided me with a solid foundation in full stack web development . I have demonstrated the ability to learn new technologies quickly and to work effectively in a team environment. With continued learning and practice, I am well on my way to becoming a successful full stack developer.

8.2 SUMMARY OF INTERNSHIP

Over all , In this internship I learn how to actual product is made , there is lot more involvement of a developer , a product team , a design team and most valuable presence of an Team Lead.

With the experience of this internship i also learn topics related to Bank like ITR Types and validations, Bank statement Fetching and validations , Third party APIs handling etc.

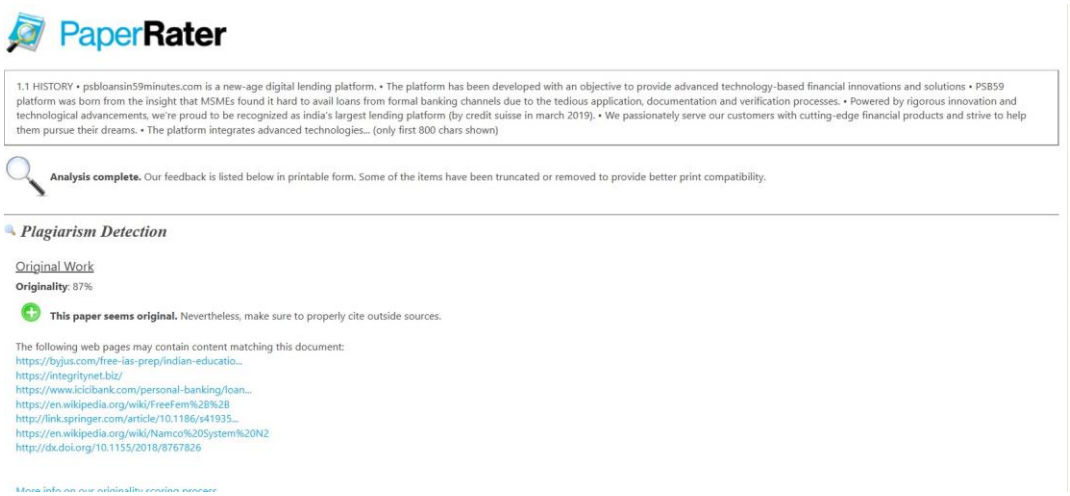
I have really enjoyed my internship time and I learn lots of things which are I really want to know As a developer and overall I learn lots of things which is very helpful in my future.

REFERENCES

1. **https://www.youtube.com/playlist?list=PL0zysOflRCelmjxj-g4jLr3WKraSU_e8q**
2. **https://www.youtube.com/watch?v=35EQXmHKZYs**
3. **https://www.youtube.com/watch?v=MU2e6-CC3Pc**
4. **https://www.youtube.com/playlist?list=PL8p2I9GklV45--5t7_N4lveUI6Y31vQ6C**
5. https://material.angular.io/
6. https://ng-bootstrap.github.io/

Appendix:

Plagiarism Certificate:



PaperRater

1.1 HISTORY • psbloansin59minutes.com is a new-age digital lending platform. • The platform has been developed with an objective to provide advanced technology-based financial innovations and solutions • PSB59 platform was born from the insight that MSMEs found it hard to avail loans from formal banking channels due to the tedious application, documentation and verification processes. • Powered by rigorous innovation and technological advancements, we're proud to be recognized as india's largest lending platform (by credit suisse in march 2019). • We passionately serve our customers with cutting-edge financial products and strive to help them pursue their dreams. • The platform integrates advanced technologies... (only first 800 chars shown)

Analysis complete. Our feedback is listed below in printable form. Some of the items have been truncated or removed to provide better print compatibility.

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