

# 6CS007

## Project and Professionalism

### Artifact Design - React & Rise

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## **1. Artifact:**

An artifact is a result of software development; examples include models, scripts, and diagrams created throughout the development process. Making an artifact is important because it demonstrates how programming should function. Programming without an artifact is equivalent to building a home without blueprints.

The project will use the agile methodology, specifically the Kanban framework. While there are alternative approaches such as DevOps deployment, waterfall, and rapid application, we chose agile because of its ability to allow development and testing to occur concurrently. In contrast to linear methodologies such as waterfall, where progression to the next development phase is dependent on the completion of previous work, agile with Kanban allows for a more fluid and continuous workflow. While DevOps deployment and rapid application is the method, we are familiar with. Agile is far better than waterfall as it is client-focused and their involvement is continuous in every stage, quality of development is maintained, client and team exactly. Know the things that are completed and need to be completed, which reduces the development process. In addition to that, it allows more communication between managers, developers, testers, and customers which may lead to last minute changes, which is also possible. Furthermore, a wireframe is the initial task done. before the development as it helps developers to understand their interface in a better way focusing on the user experience as well as encouraging early changes efficiently.

Lastly, for the test plan, both black box and white box testing will be used so that the system outcome would be same as that of mentioned in the product backlog without any error on both the functional and structural part.

## 2. Gantt Chart

A Gantt chart is a visual depiction of a project schedule that displays tasks, milestones, and dependencies over time. It is often made of a horizontal timeline with bars representing tasks or activities, with the length of each bar indicating its duration and the position indicating its start and end dates. Gantt charts enable project managers and teams to visualize project progress, detect possible bottlenecks, and effectively manage resources.

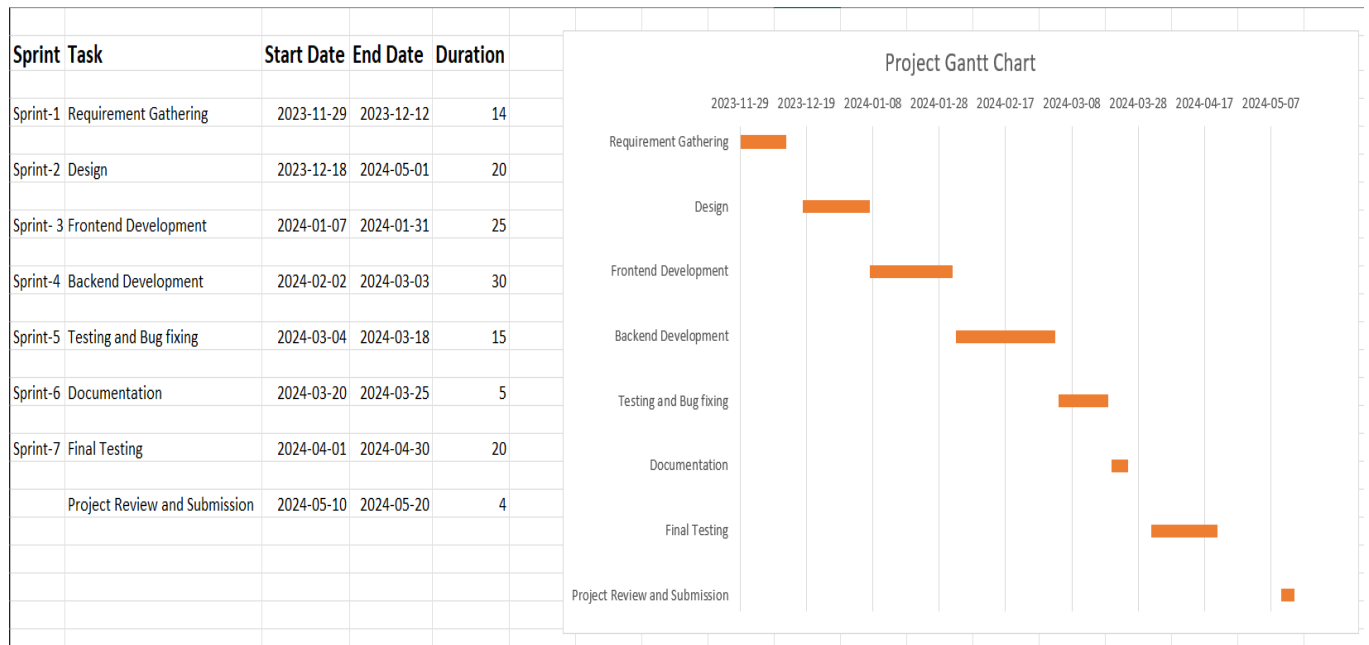


Figure 1 Gantt Chart

### 3. Product Backlog:

H7	▼	fx	S		
	A	B	C	D	E
1	Epic	User Story	Acceptance Criteria	Priority	
2					
3	User	Involves tasks related to user authentication.	As a user, I want to reset my password if I forget it.	High	
4	User	Crucial for providing access control and security to users.	As a user, I want to receive a verification email after signing up to verify my email address. Ensures the validity of user-provided email addresses and enhances security by confirming user identities.	High	
5	User	Includes signing up and logging into the application.	As a user, I want to be notified of any suspicious login attempts to my account. Enhances account security by alerting users to potential unauthorized access attempts, allowing them to take appropriate actions to safeguard their accounts.	High	
6	User	Focuses on tasks related to creating, joining, and managing rooms within the application.	As a user, I want to receive notifications when someone joins my room or posts a comment. Keeps users informed about relevant activities within their rooms, facilitating timely engagement and interaction with other participants.	High	
7	User	Aimed at enabling users to organize and participate in discussions effectively.	As a user, I want to see a history of activities within my room, such as comments posted and participants joined. Provides users with a comprehensive overview of past interactions and events within their rooms, aiding in tracking discussions and monitoring room activity over time.	High	
8	User	Involves implementing a commenting system within rooms.	As a user, I want to edit my comments within a certain time frame after posting them. Allows users to correct mistakes or remove outdated information from their comments, enhancing user control and experience.	Medium	
9	User	Aims to facilitate communication and interaction among users.	As a user, I want to receive notifications when someone replies to my comments or mentions me in a comment.	Medium	
10			As an admin, I want to monitor system performance and usage metrics to identify and address any issues proactively. Enables administrators to track the		

Figure 2 Product Backlog

## 4. Kanban Board:

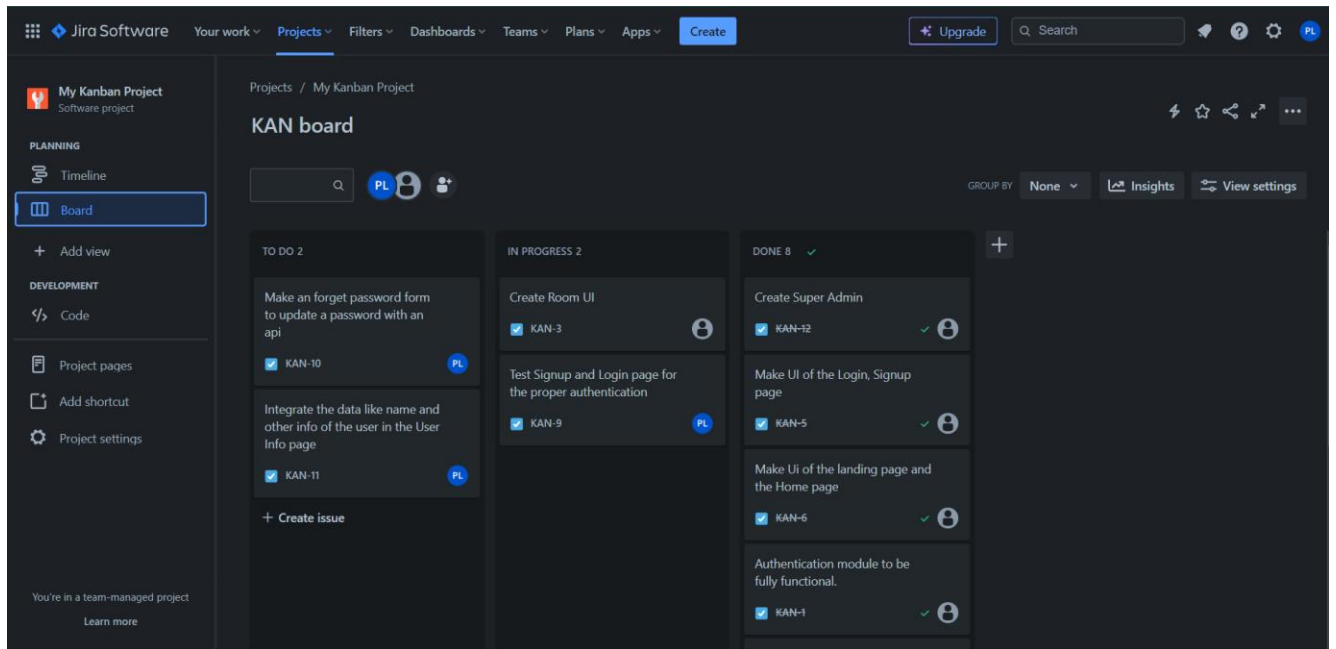


Figure 3 Sprint Backlog1

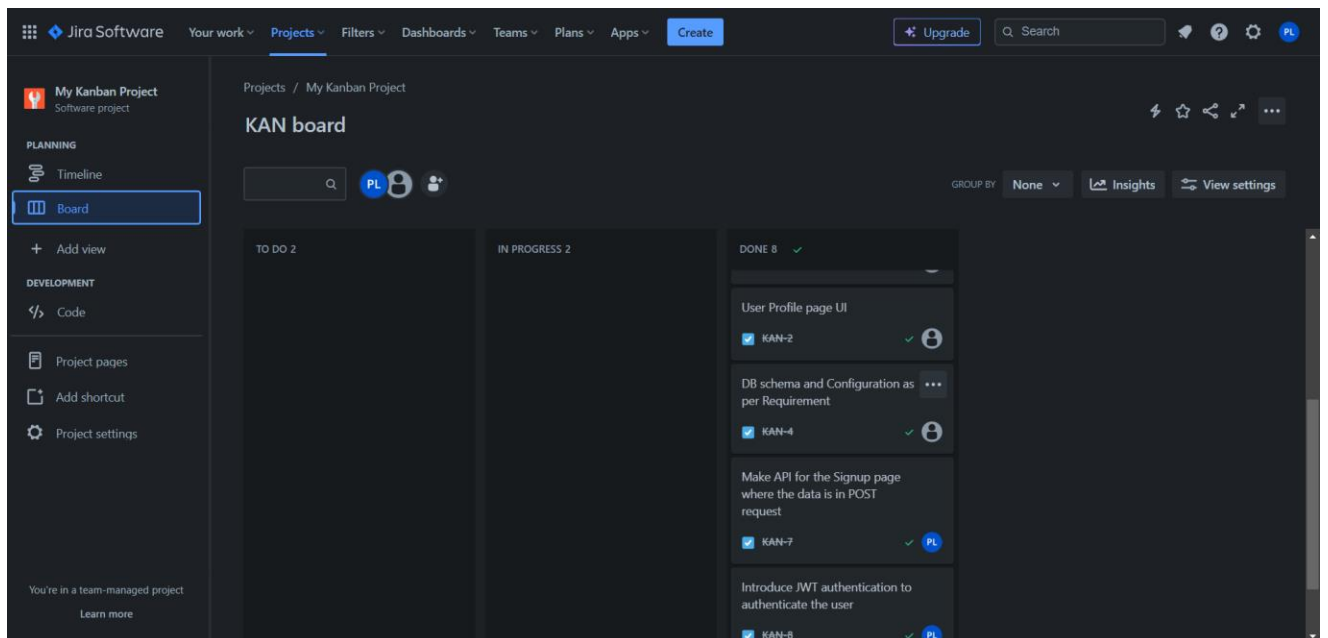


Figure 4 Sprint Backlog2

## 5. Functional Decomposition Diagram (FDD):

It is an overall picture of a system where the system function is divided into steps and sub steps.

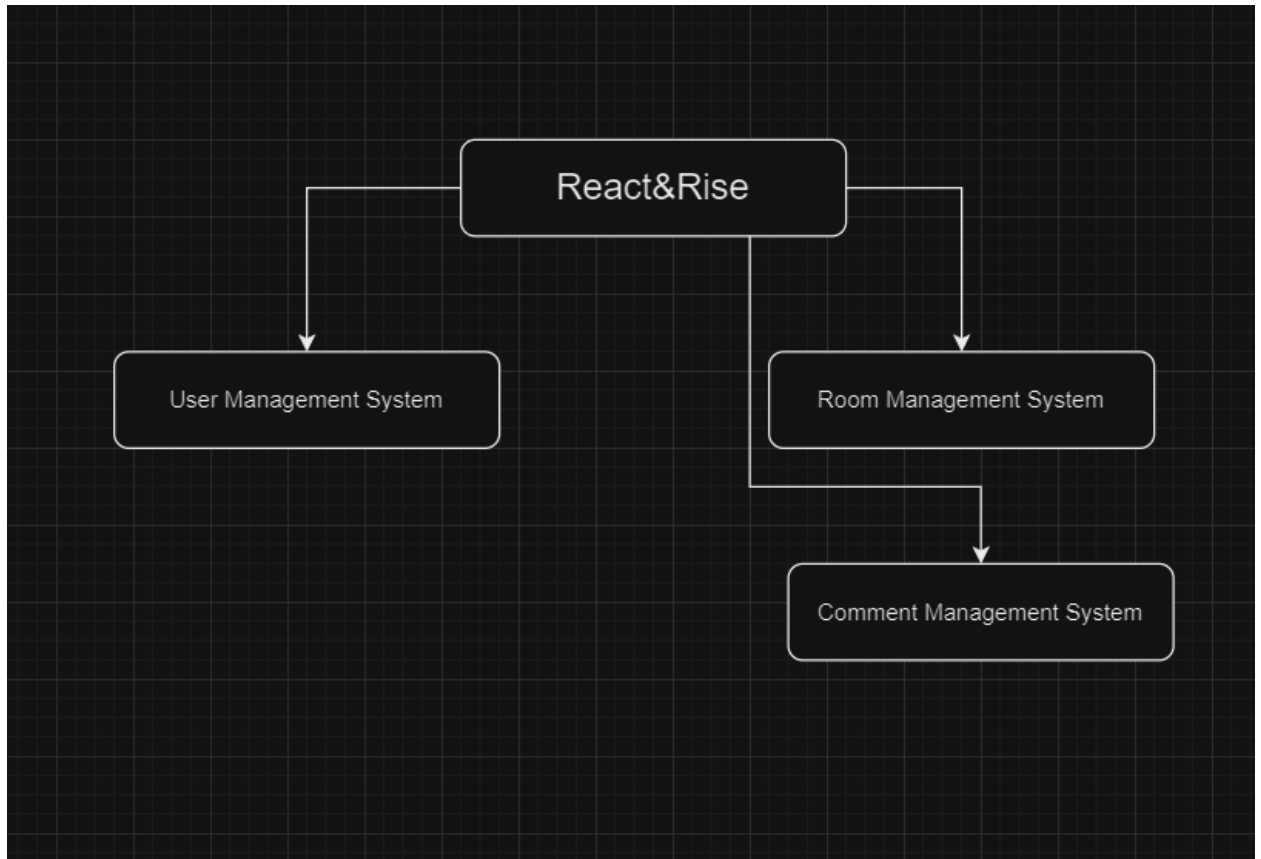


Figure 5 FDD Diagram

### Legend

UMS – User Management System

CMS – Comment Management System

RMS- Room Management System

### Requirement Types:

FR – Functional Requirement

NFR – Non-Functional Requirement

UR – Usability Requirement



## 5.1.User Management System

S. N	Requirement Description	Use Case	Priority
1	The system should allow the user to signup and login. Also, it should allow signup through Google.	User signup and login	Must Have
2	The system should allow the user to also signup login through Google.	User signup and login through social media	Could Have
3	For security purpose while submitting the signup form the inserted data by the user must be encrypted.		Must Have
4	Password inserted by the user must be a combination of alphabets, numbers and special characters		Must Have
5	The system should allow the user to reset their password in case they forget it.	Reset Password	Should Have
6	After the password is reset the system must display an alert message stating your password is changed.	Alert password reset	Should Have
7	The user must be able to view every page available in the system	View pages	Must Have

8	The admin should be able to add and delete user in the system	Add, delete users	Must Have
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### 5.1.1. Activity Diagram of UMS

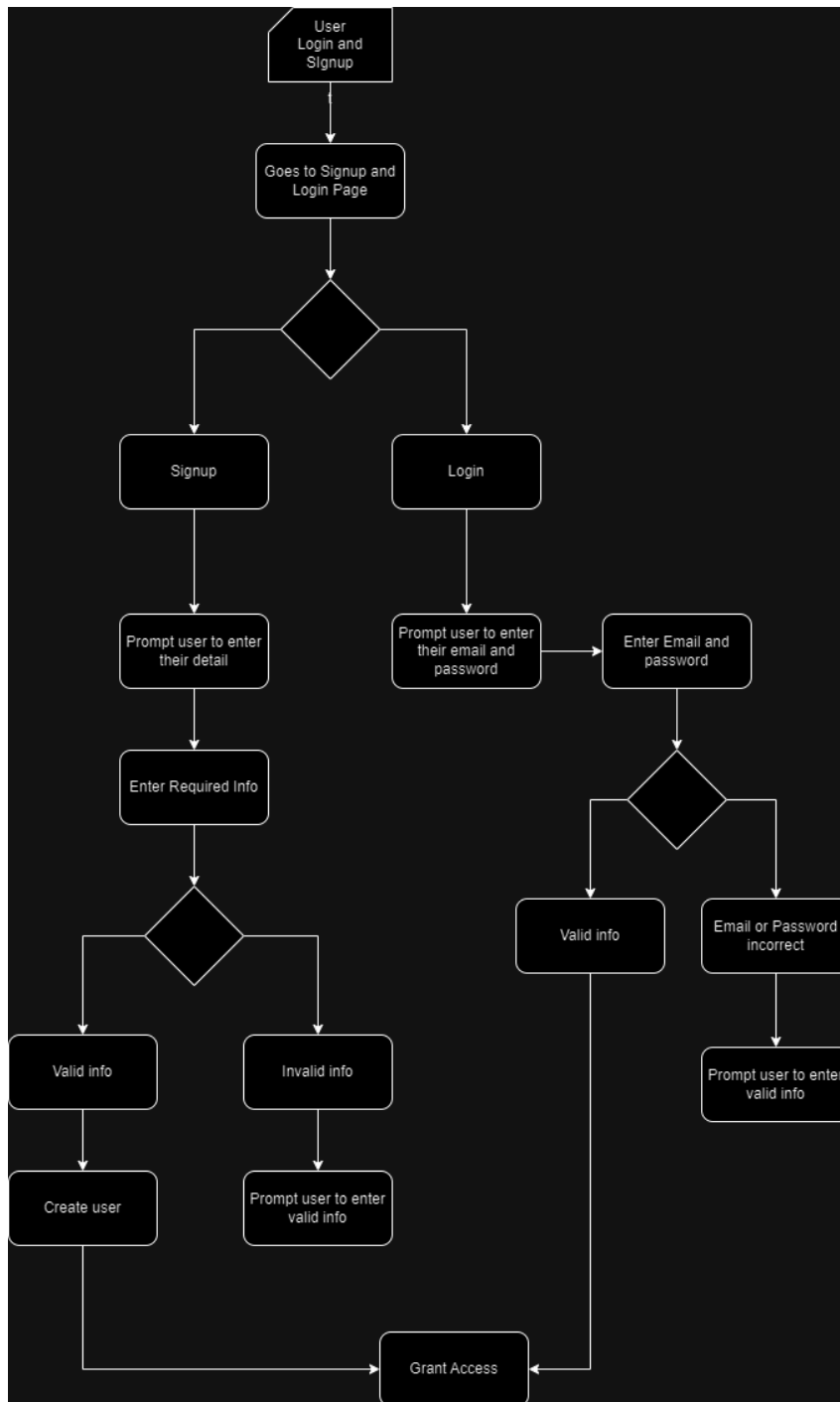


Figure 6 Activity Diagram of UMS 1

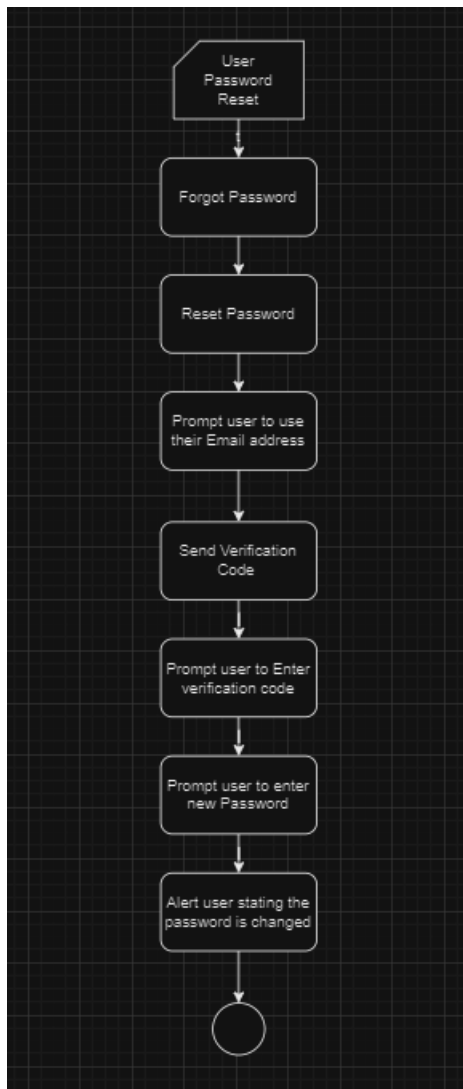


Figure 7 Activity Diagram of UMS 2

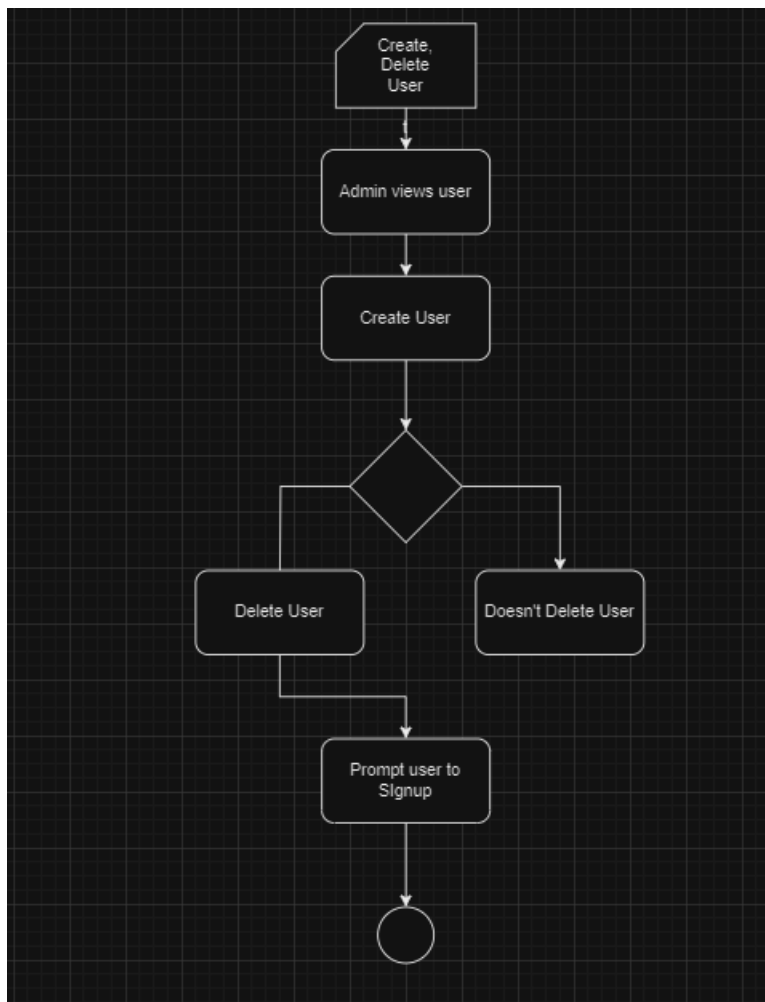


Figure 8 Activity Diagram of UMS 3

## 5.2. Comment Management System (CMS):

S. N	Requirement Description	Use Case	Priority
1	The System should allow the participants to comment their questions.	Add discussion post	Must Have
2	The system should allow the participants to upvote if their question is same.	Add discussion post	Must Have
3	The written discussion post with date of upload must be visible to other participants and Presenter	View discussion post	Could Have
4	The system should allow Presenter to mark it as read question.	View discussion post	Must Have
5	The Presenter and Admin should be able to see the number of comments and Number, or user engaged	View discussion post	Must Have

### 5.2.1. Activity diagram of CMS

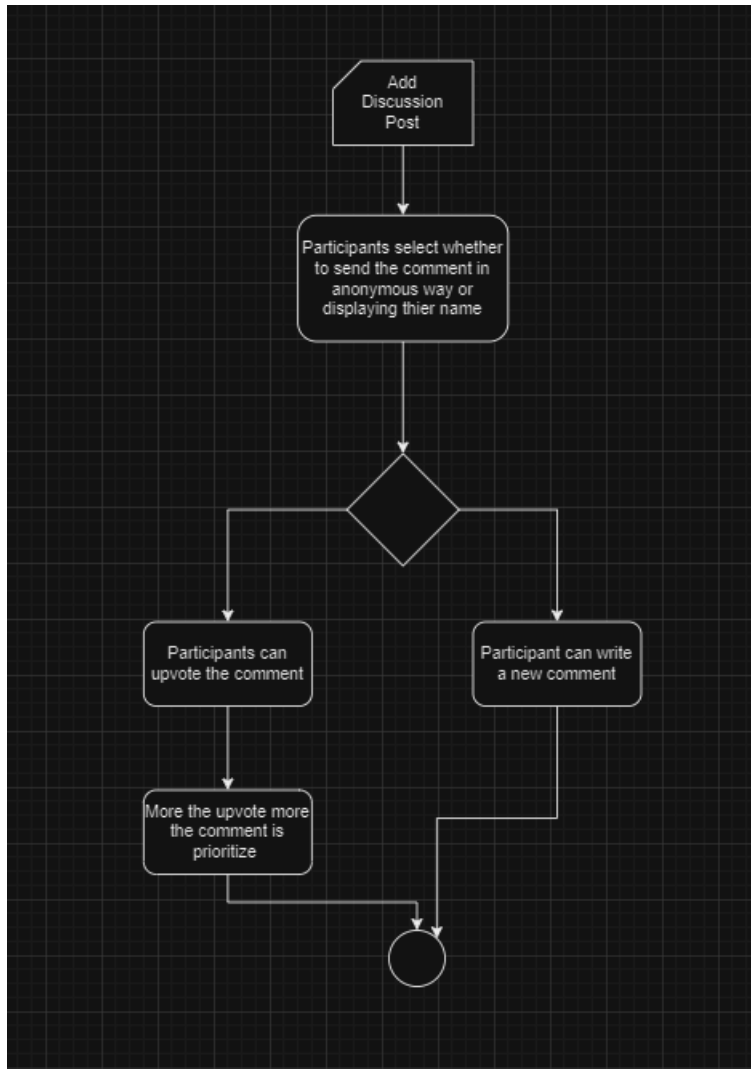


Figure 9 Activity Diagram of CMS 1

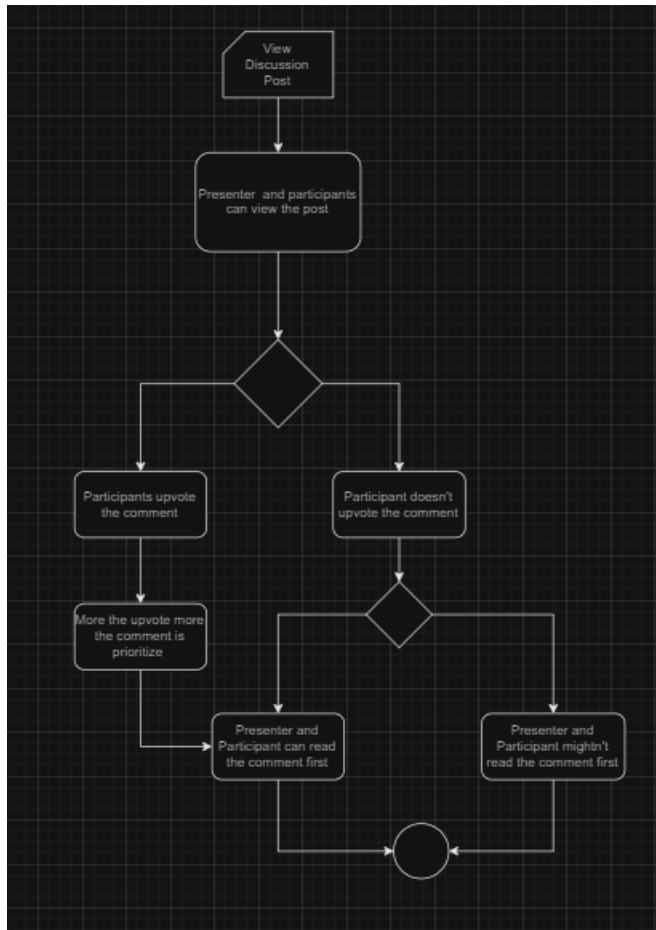


Figure 10 Activity Diagram of CMS 2



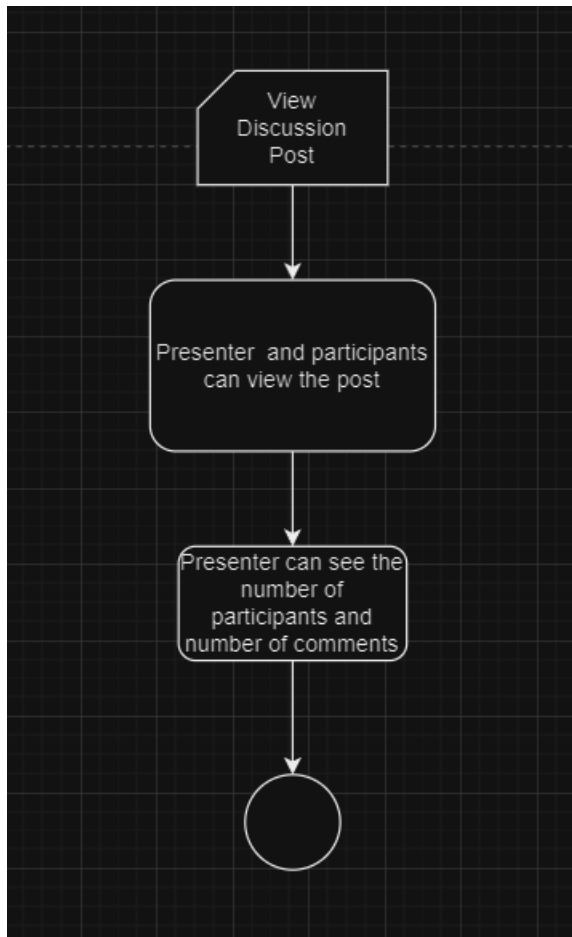


Figure 11 Activity Diagram of CMS 3

### 5.3.Room Management System (RMS):

S. N	Requirement Description	Use Case	Priority
1	The System should allow the user to create the room for a discussion	Room Creation	Must Have
2	If the user is not logged in then they are only allowed to enter the room not to create	Room Creation	Must Have
3	If the user creates the room that user should give access to mark the question as read and other option	Room Creation	Must Have
4	If the user is just entering the room without logged it, then the user should be given the permission to write the comment and upvote the comment.	Room Creation	Must Have
5	If the user has created the room, then the user can see every status of the room that is created	Room Creation	Must Have

#### 5.3.1. Activity Diagram of RMS

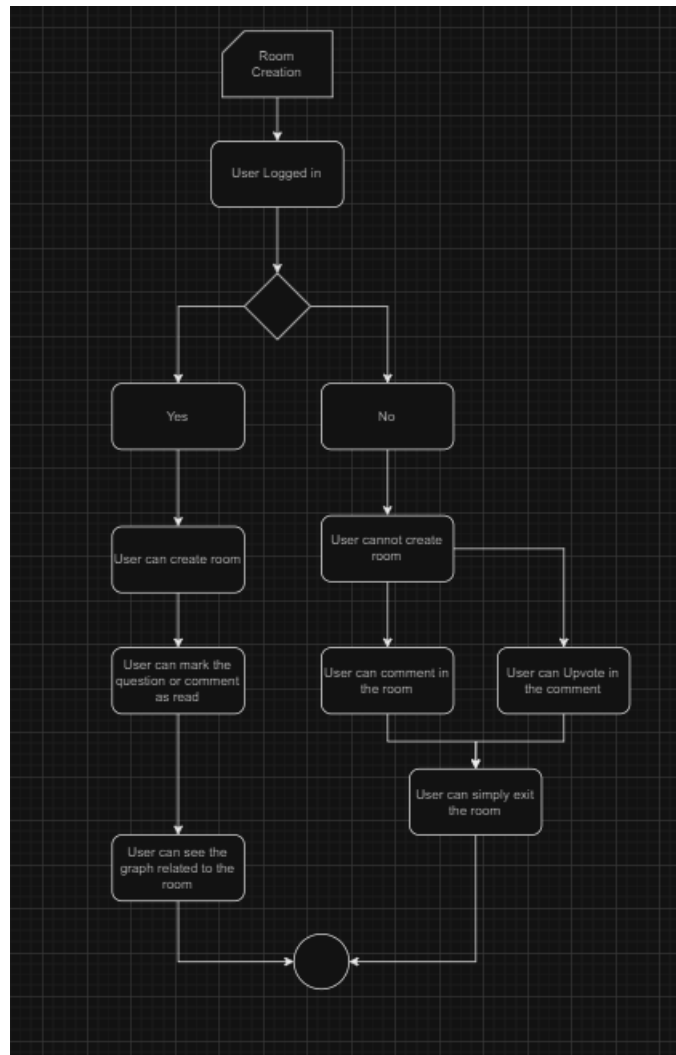


Figure 12Activity Diagram of RMS

## 6. Class Diagram

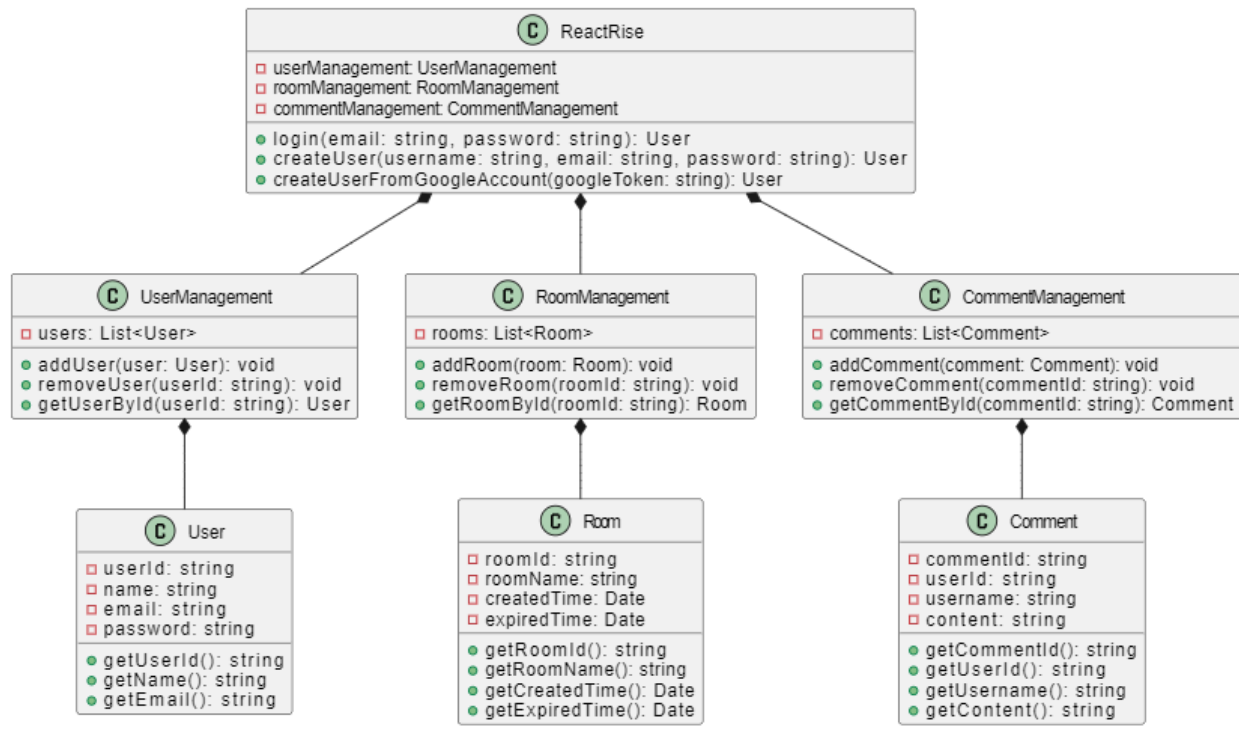


Figure 13 Class Diagram of React&Rise

## 7. Entity Relationship diagram

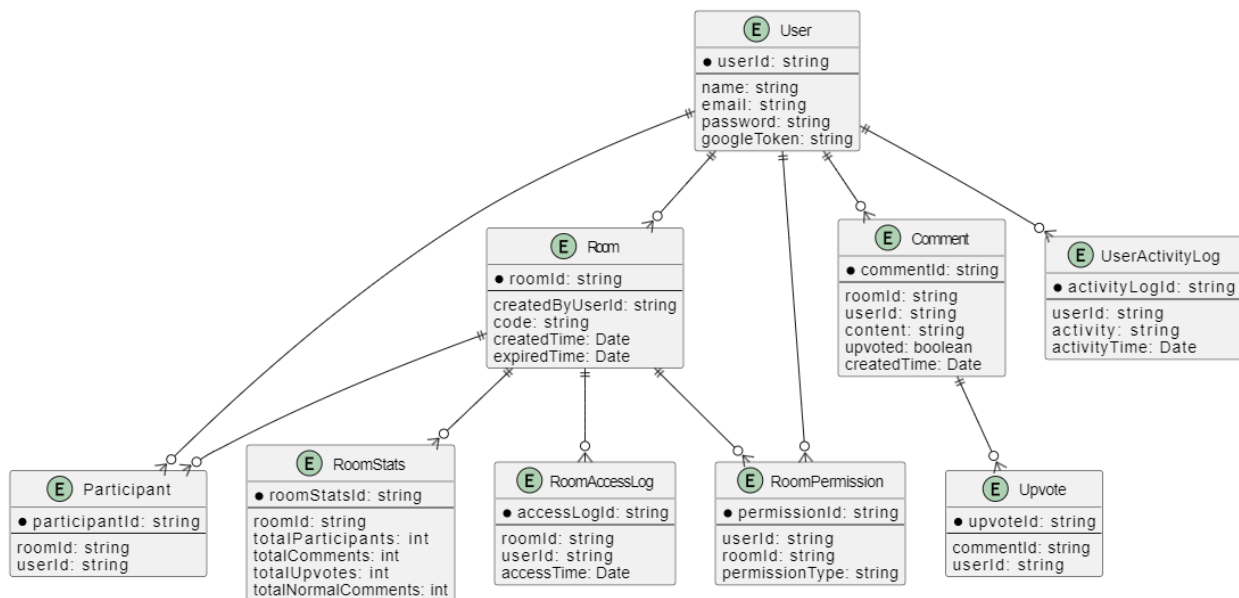


Figure 14 ER Diagram

## 8. Wireframe / UI Design

Wireframe is a blueprint design that defines the outline of both webpage and app.

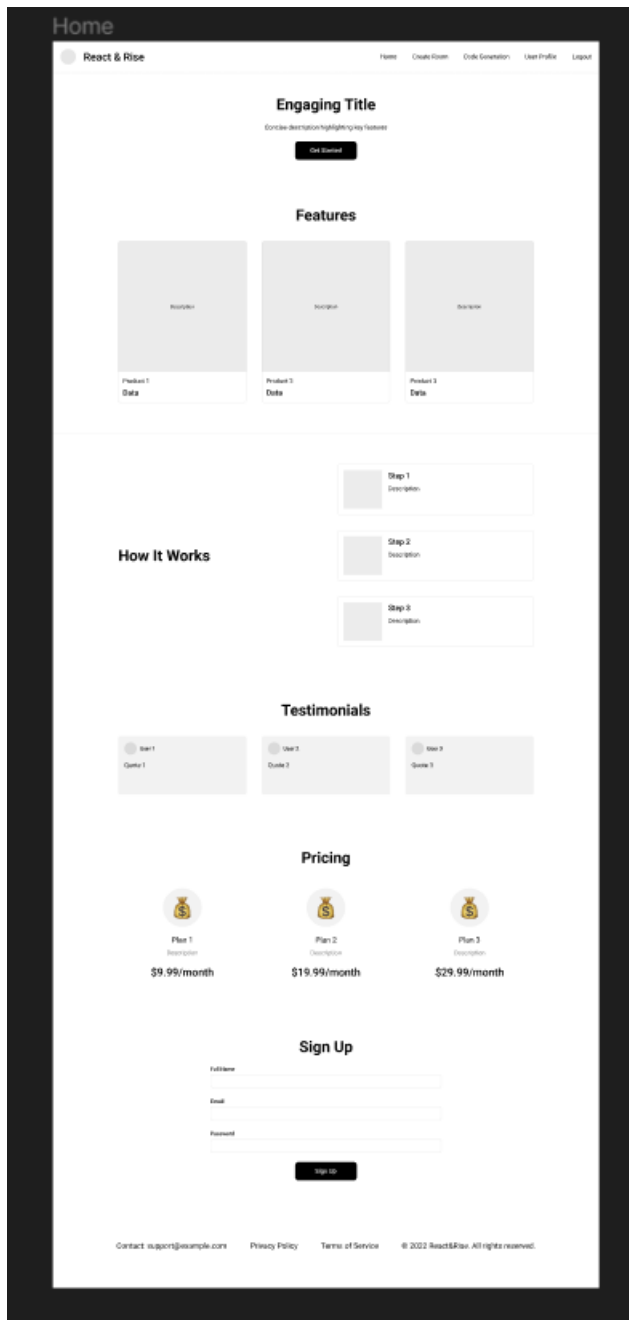


Figure 15 Homepage Design



Figure 16 Login page design

Sign up page

### Sign Up

[Back to Login](#) [Sign Up](#)

### Sign Up

**Full Name**  
Enter your full name

**Email**  
Enter your email address

**Password**  
Enter a password

**Confirm Password**  
Re-enter your password

[Sign Up](#)

### Terms and Conditions

**Terms of Service**  
I agree to the terms and conditions.

### Privacy Policy

**Privacy Policy**  
I acknowledge and accept the privacy policy.

### Sign up with Social Media

You can also sign up using your social media account.

Google

Sign up with Google

Google

Facebook

Sign up with Facebook

Facebook

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[Terms of Service](#)

[Privacy Policy](#)

Figure 17 Signup design

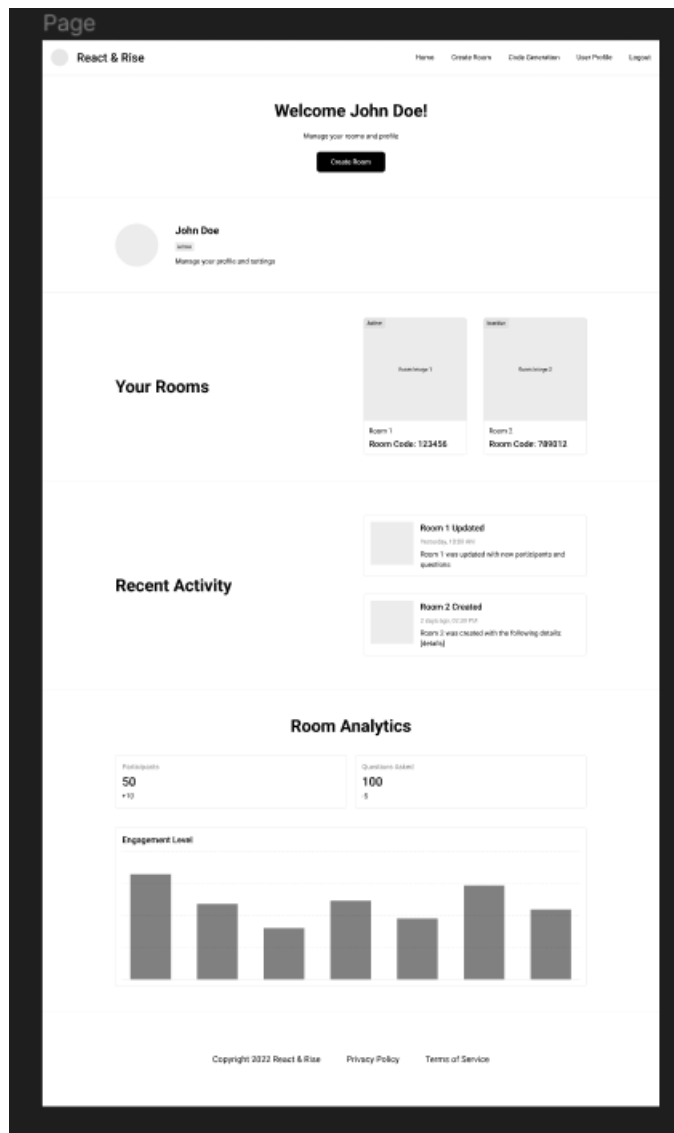


Figure 18 Information Page design



Info Page

React & Rise

[Home](#)
[Create Room](#)
[Edit Room](#)
[Room Policy](#)
[Logout](#)

User Profile

View and edit your profile information

Save Profile

John Doe

2000

add a brief description about yourself

Change Profile

Edit Profile

Account Information

Full Name

John Doe

Edit

Email

john.doe@example.com

Edit

Account Creation Date

January 1, 2022

Edit

Change Password

Current Password

Enter your current password

New Password

Enter new password

Confirm Password

Confirm new password

Change Password

Notification Settings

Receive Emails

Yes

No

Receive Notifications

Yes

No

Save Settings

Security Settings

Two-Factor Authentication

Enabled

Disabled

Save Settings

Favorite Rooms

Room 1

1.0

Learn your date of birth

Last Updated:

January 10, 2022

Room 2

1.0

Learn your date of birth

Last Updated:

January 15, 2022

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Privacy Policy

Terms of Service

Figure 19 User Profile Page Design

25

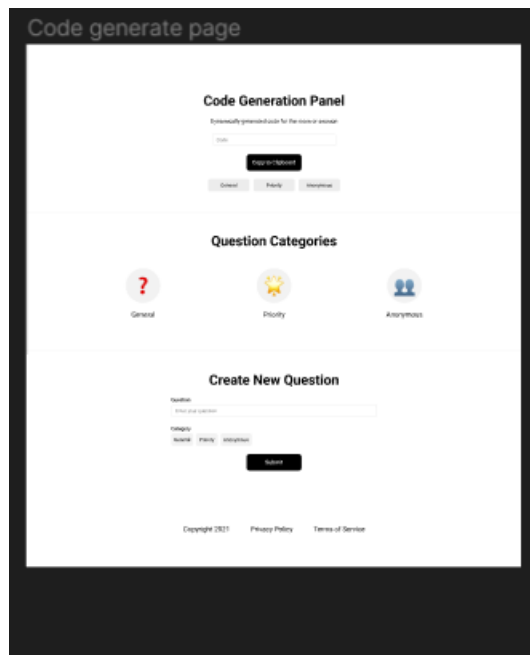


Figure 20 Code Generation page Design

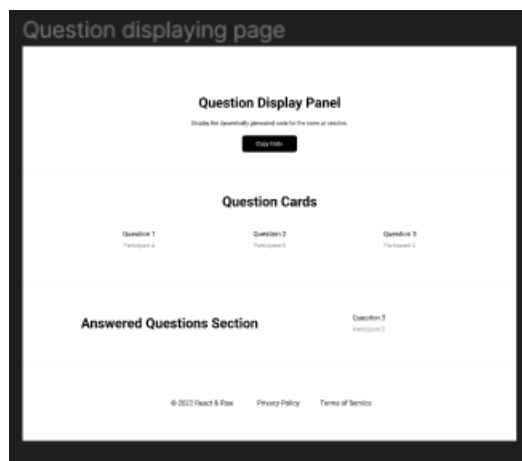


Figure 21 Question Displaying Page



Feedback

</>

Feedback

Feedback Form

Name

Email

Message

Message placeholder text

Feedback Category
 [Bug Report](#)
[Course Support](#)
[General Feedback](#)

Student ID

Feedback ID: FB-2024-001 | 10/26/2024 10:00 AM

Submit

Additional Comments

Feedback ID: FB-2024-001 | 10/26/2024 10:00 AM

Additional Comments

Feedback ID: FB-2024-001 | 10/26/2024 10:00 AM

Additional Comments

Category	Percentage
General Feedback	70%
Course Support	20%
Bug Report	10%

Assistant
   
 Feedback ID: FB-2024-001
   
 Contact us for any further assistance

Figure 23 Feedback page Design

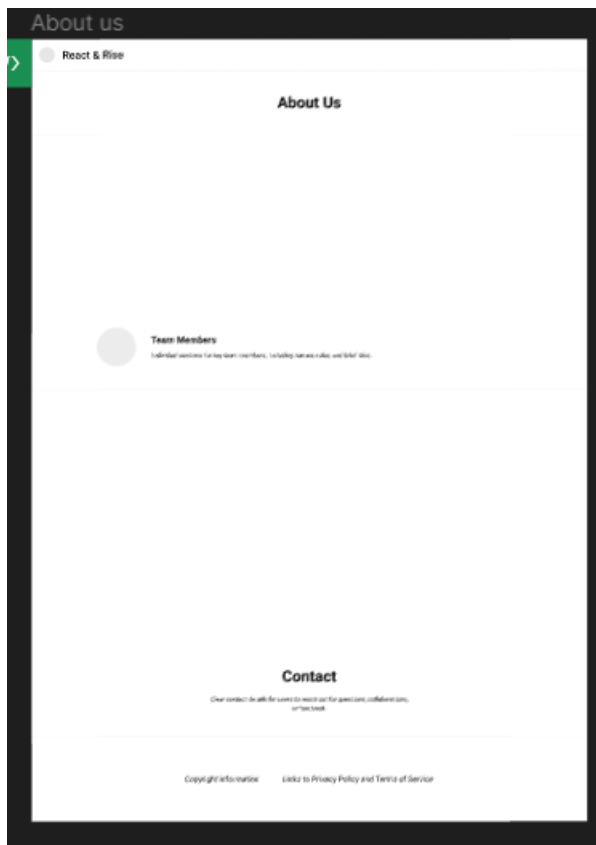


Figure 24 About Us page design

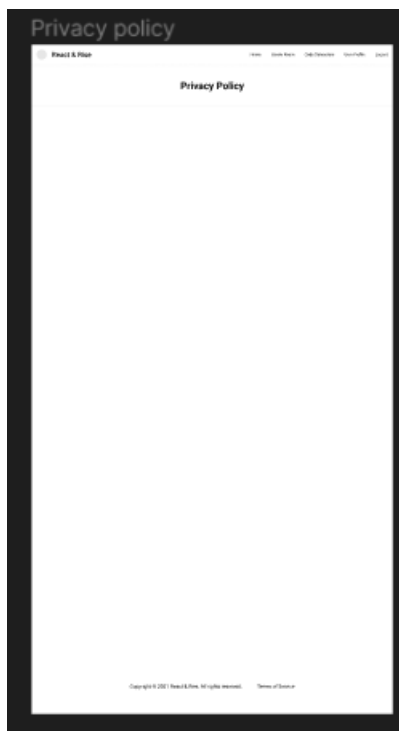


Figure 25 Privacy Policy page Design

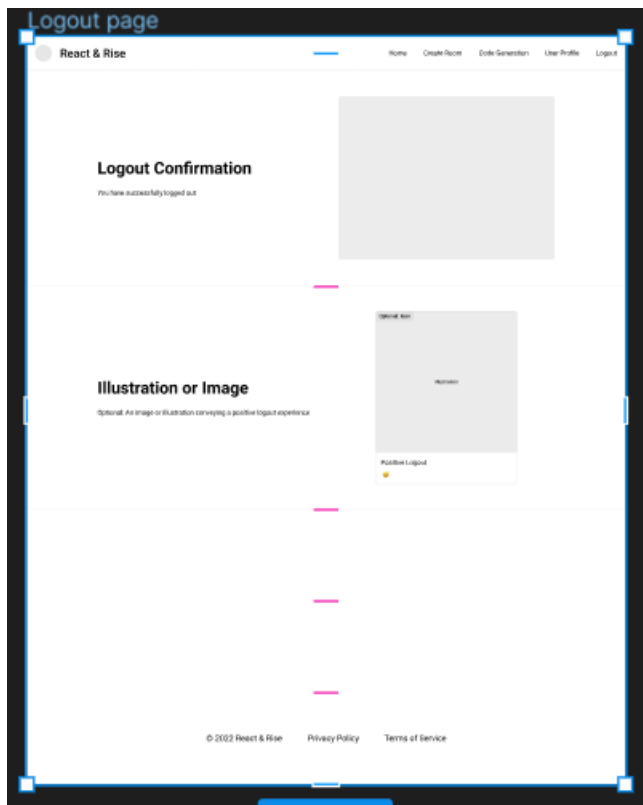


Figure 26 Logout Page