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Project Report

Project Report - React & Rise

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Declaration Sheet

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Declaration Sheet

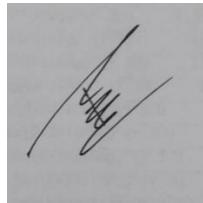
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Abstract

This project investigates the creation and implementation of React&Rise, an anonymous communication platform intended to promote free discussion and information exchange in educational and professional environments. The Kanban approach is used in the project because it is flexible and provides real-time visibility, allowing for continual improvement and adaptation to changing requirements. React&Rise attempts to increase educational engagement, participation, and learning results by using interactive presenting technologies such as Mentimeter, as well as communication and cooperation in business settings. This report contains a thorough literature study, an analysis of the system's functionality, and an assessment of its efficacy in meeting the project's goals. The findings show that anonymous communication platforms can greatly boost user involvement and build a more inclusive and participatory environment, albeit with the need for rigorous regulation.

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1. Introduction

'Communication is Key to Success.'-Paul J. Meyer

Communication is the lifeblood of human contact, creating complicated webs of connection that form our knowledge, relationships, and even the fabric of society. Individuals traverse the complexity of interpersonal dynamics by exchanging thoughts, ideas, and emotions, forming alliances, resolving problems, and working together to achieve common goals. However, the consequences of these exchanges go well beyond simple discourse; they impact perceptions, decisions, and the course of our life. Whether encouraging harmony or stimulating creativity, good communication creates the framework for mutual understanding and collaborative growth, highlighting its critical role in defining our shared human experience.

But when we attend some meetings, some seminar sessions we hesitate to deliver our creative thoughts and share our ideas. So, React&Rise is a platform where you can share your ideas and your thoughts publicly without displaying your information publicly. This web application helps to communicate with the presenter or to the person who is giving the presentation and minimize the communication barrier. This application allows users to create a room where they can enter with certain codes, and they can express their thoughts and different questions in the chat with the help of anonymous messaging. This application even allows users to create a polling system where we can vote for the suitable option without submitting our personal information.

To comment or question the presenter through this application the user can even share their thoughts by sitting in their home and using their mobile or laptop free of cost. This application allows presenters to see the analysis of the room by comparing the number of presenters and the number of comments and analyze the outcomes of the room. This application allows news to analyze the thoughts of the citizen while organizing the podcast with the prime minister and president with the option of upvoting for the same thoughts or similar questions.

2. Aims

With the main aim of removing the communication barrier this application insures for the proper engagement of the participants and make the presentation fruitful. Some of other aims are:

- The fundamental goal of React&Rise is to promote open communication by giving a venue for people to openly communicate their opinions, ideas, and questions without fear of being judged or repercussions.
- The software attempts to reduce communication barriers, particularly in contexts like meetings, seminars, and presentations where people may be hesitant to speak out for a variety of reasons, including shyness or fear of being scrutinized.
- React&Rise's goal is to encourage active involvement and engagement among all participants by offering an anonymous messaging system that allows anyone to contribute to conversations and ask questions without disclosing their identity.
- The application aims to foster collaborative learning and information sharing by allowing interaction between presenters and attendees, as well as among attendees themselves, resulting in a more enriched educational experience for all parties concerned.
- React&Rise seeks to empower presenters by giving them useful insights and feedback via analytics, allowing them to assess the performance of their presentations and make adjustments to better meet the requirements and expectations of their audience.
- By allowing individuals to submit their comments and questions during podcasts or debates with public figures such as the prime minister or president, the program intends to increase democratic engagement and promote a more inclusive exchange of ideas and perspectives.

- React&Rise stresses user privacy and security by permitting anonymous participation and guaranteeing that no personal information is exchanged or exposed during platform interactions.
- The application's features, such as polling systems and upvoting, seek to improve consensus-building and assist decision-makers in gathering useful ideas from a variety of views, eventually leading to more informed judgments.
- React&Rise intends to enable accessibility by allowing people to join from any location, using any device with internet connectivity, therefore eliminating geographical and logistical hurdles to communication and cooperation.

3. Objectives

To achieve the aim outlined certain objective are aligned and written below:

- Increase the number of participants who actively participate in discussions and share their ideas by 20% within the first six months of the application's introduction.
- Implement strong encryption and security mechanisms to protect user anonymity and privacy, ensuring that all interactions on the platform are private and secret.
- Improve the application's user design and experience by collecting user input and conducting usability tests, resulting in a 30% improvement in user satisfaction ratings within the first year.
- Create tools that enable presenters to receive real-time feedback and analytics during presentations, allowing them to tailor their content and delivery to audience involvement and response.
- Implement analytics tools to monitor user interactions and sentiment on the platform, giving speakers and organizers valuable data to improve future events and conversations.
- Collaborate with media outlets and public personalities to promote the use of React&Rise as a platform for engaging individuals in public debate and decision-making, resulting in a more informed and active society.

- Establish trust and credibility among users by following community norms and moderation practices that promote courteous and productive speech while also creating a friendly and inviting atmospheres for all members.
- Create key performance indicators (KPIs) and metrics to assess the application's impact and effectiveness in accomplishing its objectives, routinely monitoring, and analyzing progress toward goals and making improvements as needed.

4. Artifact

The React&Rise web application enables anonymous conversation and engagement within virtual rooms. Users may establish and join rooms, participate in polls, and send real-time messages. The software prioritizes user privacy, security, and convenience of use, with features such as encrypted communication, role-based access, and extensive analytics. To ensure flexibility and scalability, the system is separated into subsystems, each responsible for a certain functionality.

4.1. Functional Decomposition Diagram (FDD):

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

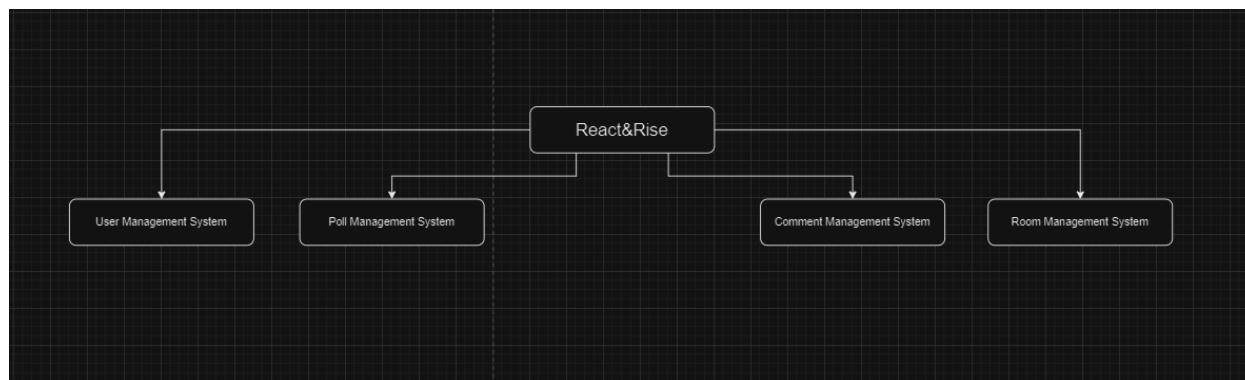


Figure 1 FDD Diagram

The Functional Decomposition Diagram (FDD) depicts the many functions and subsystems of the React&Rise web application. Below is a breakdown of the key functions and their corresponding subsystems:

- a) User management system

- User Registration: Manages user registration and authentication, which includes both traditional login options for security purposes.
 - User Login: Users can join up or log in for ease.
 - Profile Management: Users may maintain their profiles and update personal information.
 - Authentication and Authorization (JWT based): There is high security in the privacy of the user and their personal information.
- b) Poll Management System
- Create poll: Allows users to create new polls with various question types and options.
 - Participate in Polls: Users may vote in polls and see live updates on poll results.
 - View poll results: Poll results are shown in real time, providing participants with rapid feedback.
- c) Comment Management System
- Post Comment: Enables users to leave comments in rooms or on individual subjects.
 - Edit Comment: Users can edit their comments to correct or update information.
 - Erase Comment: Allows users to erase their remarks if required.
 - Regulate remarks: Room moderators can control and regulate remarks to provide a courteous and suitable conversation environment.
- d) Room Management System
- Establish Room: Allows users to establish virtual rooms for a variety of uses, including meetings and conversations.
 - Join Room: Users can join existing rooms by invitation or by searching for public rooms.
 - Manage Room parameters: Allows room owners to customize parameters such as the room name, description, and privacy choices.
 - Assign Room Roles: Room owners can assign roles to members, such as moderators or participants, to help manage room activity more efficiently.

4.2. System Overview

The React&Rise web application is designed as a comprehensive platform that enables users to engage in anonymous communication within a secure and user-friendly digital environment. At its core, the application facilitates the creation and management of virtual rooms where users can participate in discussions without revealing their identities. This is particularly useful in scenarios where privacy and confidentiality are paramount, such as in mental health support groups, anonymous feedback sessions, and other sensitive communications.

4.2.1. Room Management System

One of the most notable aspects of React&Rise is its room management system. This technology enables users to effortlessly build, join, and administer virtual rooms, creating a flexible and dynamic environment for interaction. Users may tailor room settings to their needs, ensuring that each area fulfills its intended function successfully.

React&Rise makes use of Django Channels to provide powerful real-time communication capabilities. This technology guarantees that messages and notifications arrive instantly, resulting in a smooth and engaging user experience. Users may communicate in real time, receive timely information, and remain engaged in ongoing discussions without delay.

4.2.2. Poll Management System

The program contains a powerful polling mechanism to increase participation and collect real-time feedback. This feature enables users to create polls, participate in them, and view the results immediately. Such a method is critical for gathering ideas and making rapid and democratic decisions on the platform.

4.2.3. User Management System

User management is another critical component of React&Rise, providing functionalities for user registration, login, and profile management. The application supports JWT-based authentication, which secures user sessions by ensuring that each session is encrypted and verified. This prevents unauthorized access and protects user data from potential breaches.

Security and privacy are at the forefront of React&Rise's design. The application implements stringent security measures, including data encryption and compliance with privacy regulations. This ensures that all user data is protected against unauthorized access and potential cyber threats. Additionally, features like message encryption and abuse detection help maintain a safe and respectful environment for all users.

4.2.4. Comment Management System

The comment management system is another important feature that allows users to submit and control comments inside rooms. This subsystem allows anonymous communications, allowing users to express their opinions and criticism without disclosing their identity. To promote a healthy communication environment, the comment management system offers capabilities for chat moderation and message encryption, which ensure that all conversations are courteous and safe.

4.2.5. Reporting and Analytics

The analytics and reporting system included in React&Rise provides complete insights into user interactions and room engagement. Administrators and moderators get access to thorough information on how users interact with the platform, which rooms are the most popular, and what sorts of talks are the most engaging. This data is crucial for constantly enhancing the platform and adapting it to user demands.

Finally, React&Rise's user interface prioritizes usability and accessibility. The platform is responsive and accessible from a variety of platforms,

including PCs, tablets, and smartphones. Users of various technical skill levels may easily engage with the platform because of its straightforward navigation and user-friendly design. Accessibility features guarantee that the platform is accessible, accommodating users with varying requirements and preferences.

To summarize, React&Rise is a multifunctional online application that combines safe anonymous communication, dynamic room management, real-time interactions, extensive analytics, and strong security measures to create a user-centric and dependable platform.

5. Academic Question

- To what extent does the implementation of anonymous communication platforms, such as React&Rise, influence participation rates and knowledge exchange in academic seminars and professional meetings?

The use of anonymous communication tools, such as React&Rise, has a major influence on participation and knowledge sharing in academic seminars and professional gatherings. These platforms empower people to discuss their opinions and ask questions without fear of being judged or facing punishments by offering a safe and anonymous space. This sense of security can lead to increased engagement, as those who would normally keep silent feel emboldened to participate in debates. In academic contexts, this can lead to a more dynamic interchange of knowledge and ideas, resulting in a deeper educational experience. Similarly, anonymity in professional meetings can promote more open and honest communication, resulting in more inventive problem-solving and decision-making processes.

The levels of engagement generated by anonymous communication platforms demonstrate their usefulness in promoting conversation and information exchange. Users are more inclined to participate actively when they believe their identity is safe, which can result in a greater number of contributions and a more broad spectrum of opinions. This can be especially useful in situations where power dynamics or social hierarchies would usually prevent free communication.

For example, younger workers or students may feel more comfortable offering their opinions and questioning ideas if they know their contributions will be anonymous, improving the overall quality of debate and learning.

Furthermore, the impact of anonymity on people's desire to share ideas and ask questions is significant. Anonymity can help to alleviate social anxiety and the fear of bad assessment, which are major impediments to participation. This is especially significant in academic seminars, where students may be hesitant to speak up owing to worries about their classmates' or lecturers' perspectives. Anonymity in professional situations may lead to more open comments and recommendations, which are essential for continual progress and innovation. The overall dynamics of communication are therefore positively altered, resulting in a more inclusive and participatory society.

However, the impact of anonymous communication platforms is not the same for various demographic groups and cultural settings. According to research, the benefits of anonymity may vary depending on gender, age, cultural background, and the nature of the topic matter under discussion. For example, in societies that place a strong priority on collectivism and collective cohesion, the usage of anonymous platforms may have less influence than in individualistic cultures where personal expression is promoted. Furthermore, demographic variables such as age and gender may impact how people perceive and use anonymity in communication. Younger people or members from marginalized groups may find these forums more valuable since they seek safe venues to express their views.

Investigating these inequalities is critical for understanding the larger consequences of anonymous communication platforms. It can indicate how various groups use these technologies and what special benefits or obstacles they face. Such insights may help shape the design and execution of these platforms, ensuring that they are accessible and valuable to all users, regardless of background or cultural context.

To summarize, anonymous communication systems like React&Rise have the potential to greatly increase engagement and knowledge sharing in academic

and professional contexts. These platforms can create more lively and inclusive debates by creating an environment in which people feel comfortable sharing their thoughts. However, the level of their influence varies by demographic group and cultural setting, emphasizing the need for more study to enhance their efficacy for varied users.

- What are the perceived advantages and disadvantages of anonymous communication platforms such as React&Rise for encouraging open conversation and information exchange in educational settings?

Anonymous communication tools, such as React&Rise, provide a crucial area for encouraging open discourse and information exchange in educational settings. One of their key benefits is the development of a secure environment in which people feel comfortable expressing their views and beliefs without fear of being judged or punished. This anonymity is especially beneficial for students who may feel alienated or afraid to participate in regular classroom discussions owing to shyness, fear of criticism, or social anxiety. By reducing the need to be identified, these platforms can encourage more widespread involvement, ensuring that a variety of opinions are reflected in debates.

Furthermore, anonymous communication platforms might promote more honest and open discourse, particularly on sensitive or contentious issues. When people don't have to worry about disclosing personal information, they may be more ready to have frank talks, which may lead to deeper insights and a more nuanced understanding of complicated situations. This can improve the learning experience by exposing students to a broader spectrum of perspectives while also fostering critical thinking and empathy.

However, despite these advantages, anonymous communication systems have significant downsides. One key worry is a lack of accountability, which allows for possible exploitation. Some users may engage in disruptive activity, such as trolling, harassing, or disseminating disinformation, without regard for the repercussions of their activities. This can impair debate integrity and produce a bad learning environment, undermining participant confidence. Furthermore, the

anonymity given by these platforms may impede the creation of meaningful connections and interactions among students. Genuine communication and collaboration frequently depend on mutual respect and understanding, which can be difficult to accomplish when parties are hidden behind anonymity.

To solve these issues and maximize the benefits of anonymous communication in educational contexts, effective moderation and monitoring are required. To avoid abuse and preserve a respectful learning environment, educators and administrators must create clear boundaries for appropriate behavior and regularly monitor conversations. Furthermore, allowing students to engage in both anonymous and non-anonymous exchanges might help find a balance between encouraging open debate and developing interpersonal connections. By carefully managing these challenges, anonymous communication platforms such as React&Rise may be useful tools for fostering inclusive and meaningful educational experiences.

- What are the ethical implications for using anonymous communication platforms like React&Rise in academic and professional settings, and how can these platforms be constructed to respect ideals of fairness, openness, and accountability?

Using anonymous communication tools such as React&Rise in academic and professional settings creates ethical concerns that must be carefully addressed. One major issue is the possibility of misuse, such as harassment, cyberbullying, or the spread of false information, with no responsibility for the offenders. Furthermore, anonymity can create an environment in which people feel empowered to participate in unethical activity, such as academic dishonesty or cheating, due to the absence of consequences for their activities. To fulfill the goals of fairness, transparency, and accountability, these platforms must put in place strong safeguards to detect and prevent improper behavior as soon as possible.

To encourage fairness and accountability, anonymous communication platforms should have strict moderation and monitoring methods. This involves using smart algorithms and human moderators to quickly detect and resolve cases of misbehavior, ensuring that users feel secure and valued in the community.

Furthermore, clear and unambiguous norms detailing appropriate behaviour and the repercussions of infractions should be widely posted, highlighting the significance of polite and ethical communication.

Platforms like React&Rise can allow individuals to reveal their names willingly during talks to promote openness and transparency. While retaining anonymity is important for some people, giving users the option to expose their names may increase responsibility and encourage responsible activity. Furthermore, fostering a culture of constructive discourse and mutual respect can help to create an atmosphere that encourages meaningful academic and professional interchange.

Finally, the design and implementation of anonymous communication systems must prioritise ethical norms and user security. By including measures that promote fairness, transparency, and accountability, these platforms can help to maintain the integrity and legitimacy of academic and professional discourse while protecting against possible ethical hazards.

5.1. Scope and Limitations

The project to construct, implement, and launch the React&Rise anonymous communication platform entails a complete effort to design and develop an online application with a variety of features designed to encourage open discourse and information exchange. These features include anonymous chat, polling systems, and analytics tools designed to improve communication in a variety of settings such as academic seminars, professional meetings, and public chats. The program intends to break down communication barriers by offering a platform for people to engage in open debate and freely express views.

However, it is critical to recognize some limits in the platform's architecture and execution. Despite attempts to promote free debate and inclusiveness, the platform cannot guarantee the prevention of all instances of abuse or inappropriate action, since the anonymity it provides may unwittingly encourage certain users to engage in unethical behavior.

Furthermore, the platform's success may be limited by factors such as user acceptance rates, technology limitations, and cultural norms regarding anonymity and online communication. Furthermore, the project's scope may be limited by factors such as time, funding, and technical skill, thus limiting the number of features and functions that may be implemented.

Furthermore, the project's impact may be influenced by other elements outside its control, such as legislation changes or adjustments in user preferences and habits. Recognizing these restrictions is critical for managing expectations and directing the platform's progress over time. It is critical to constantly evaluate user feedback and change the platform to better fulfill the demands of its users while adhering to ethical norms and encouraging responsible communication behaviors. Recognizing these restrictions and problems allows the project to better manage potential roadblocks and aim to establish a platform that optimizes its positive impact while limiting potential hazards.

6. Literature Review

6.1. Educational Application:

6.1.1. Enhancing Classroom Engagement

(Norziha Megat, 2020) will analyze research from higher education settings to investigate a specific framework's educational applications. The primary goal is to determine how the framework affects learning outcomes and increases student engagement.

(Norziha Megat, 2020) investigated the implementation of a specific framework in higher education, shedding light on the framework's role in improving the overall educational experience. The study will most likely look into a variety of framework functionalities and features, such as interactive elements, real-time collaboration features, and other elements that improve the learning environment and potentially increase student engagement.

(Norziha Megat, 2020) provide an alternative viewpoint on the framework's educational applications. The literature review seeks to determine how this framework is used in higher education, specifically how it affects learning outcomes. Learning outcomes may include skill development, academic success, and other quantifiable measures of a student's academic performance.

The literature review aims to provide a comprehensive understanding of the framework's impact on higher education by combining the findings of these studies. The review's goal is to identify trends, benefits, and potential drawbacks of implementing the framework in educational settings by assessing methods, findings, and conclusions. Furthermore, the review attempts to contextualize these findings for educators, institutions, and students, thereby contributing to a thorough evaluation of the framework's impact on higher education development.



Figure 2 Classroom Engagement

6.1.2. Active Learning Strategies:

(Emma Mayhew, 2020) conducted an extensive assessment of the effects of Audience Response Systems (ARS), such as Mentimeter, on cognitive engagement in higher education. The study will most likely look at how Mentimeter, an augmented reality system, supports active learning techniques by providing a platform for user participation and real-time communication. This engagement may include quizzes, polls, and other

interactive elements designed to increase student participation in lectures and seminars.

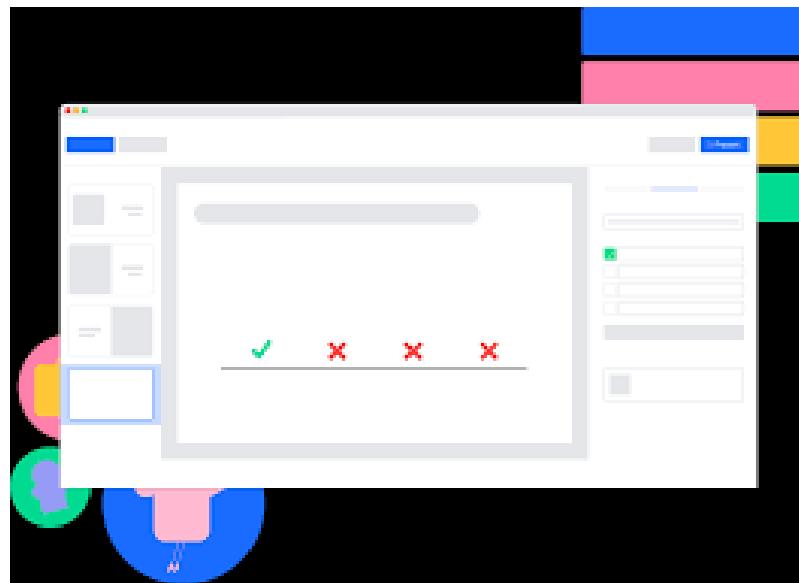


Figure 3 Mentimeter Quiz

In a related study, (Ma Mohin*, 2020) looked specifically at how Mentimeter could be used to encourage active learning during lengthy lectures. Their research focuses on Mentimeter's useful applications, specifically how it can improve student interaction and engagement during long class periods. The study could go into greater depth about Mentimeter's specific features that encourage active learning, such as its ability to collect real-time feedback, spark conversations, and foster group problem-solving.

Rank what you consider the main reasons for using mentimeter in class

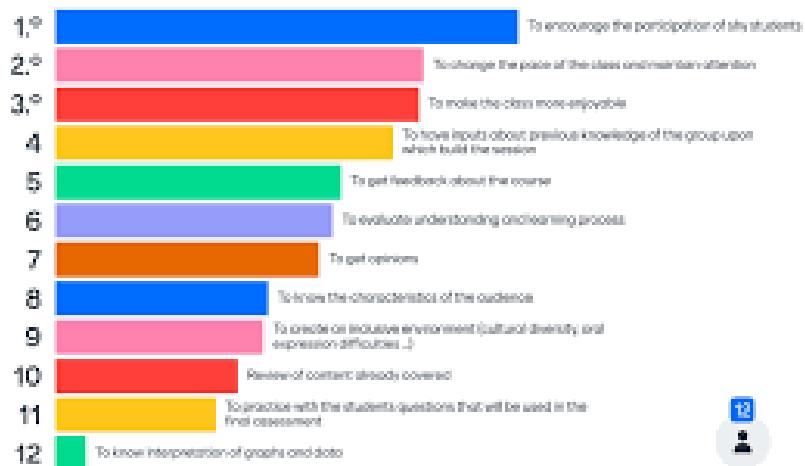


Figure 4 Main reason of using mentimeter

Both studies may provide useful information about how Mentimeter supports active learning methods. This could include how effectively the platform breaks down traditional lecture structures, encourages student participation, and fosters an interactive learning environment. The studies may also include information about Mentimeter's impact on student retention, comprehension, and overall learning outcomes.

Combining the findings of these studies yields a comprehensive understanding of how Mentimeter can be used to improve active learning in lectures and seminars. The purpose of this literature review is to establish links between the reported strategies, the observed results, and the broader implications of incorporating Mentimeter into teaching practices. All things considered; these sources contribute to the understanding of Mentimeter's role in transforming traditional lecture styles into engaging, hands-on learning environments.

What do you think of using mentimeter in class?

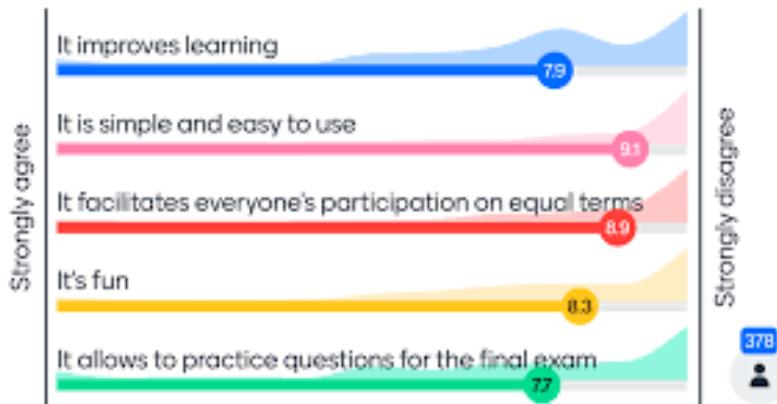


Figure 5 Benefits of mentimeter

6.2. Corporate Application

6.2.1. Employment training and Development:

(Corporate Learning Institutue, 2021) conducted an in-depth case study on how Mentimeter improves corporate training using interactive presentations. The case study will most likely focus on specific scenarios in which Mentimeter is integrated into training initiatives to actively engage employees. This could include incorporating surveys, tests, or other interactive elements into training sessions. The study could go into greater detail about how Mentimeter can help create more efficient and engaging training opportunities, allowing employees to retain more information and advance their skills.

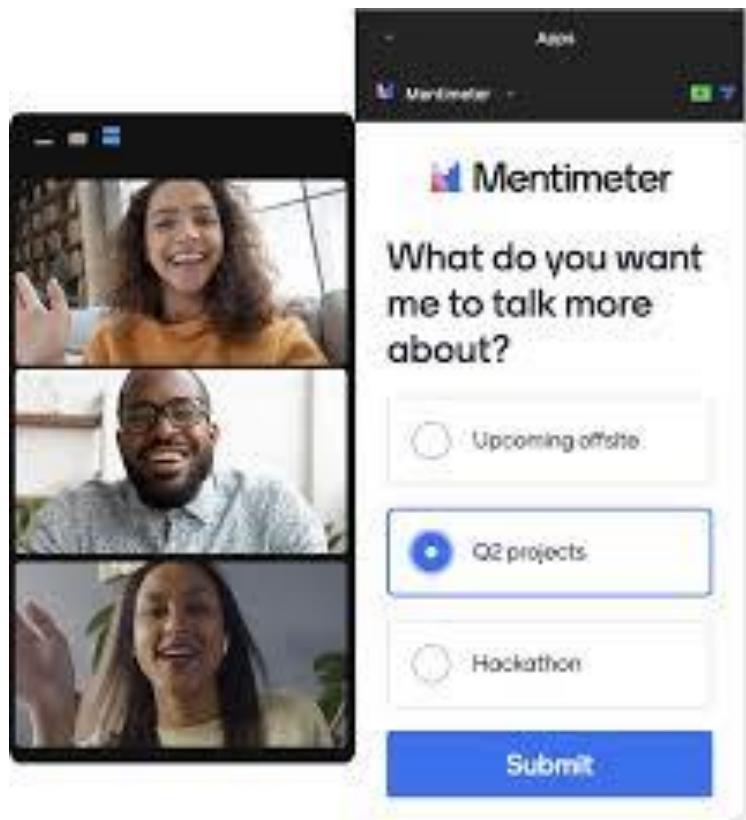


Figure 6 Using interactive platform in virtual meeting.

(Ismuheel Adewumi Raji, 2022) conducted a comparative analysis of interactive tools for effective employee training in a related research article. This study may shed light on how Mentimeter differs from other corporate learning tools. Usability, levels of engagement, and impact on learning outcomes are all likely factors to be considered in the comparative analysis. The study could also investigate how Mentimeter promotes cooperation and teamwork in corporate training settings.

The research article and case study will most likely provide useful information about Mentimeter's real-world applications in corporate training. Through an examination of these sources, we hope to learn more about how Mentimeter is integrated into training curricula, how it improves employee engagement, and how it affects corporate learning initiatives in general.

The literature review can provide a comprehensive understanding of Mentimeter's effectiveness as a tool for corporate training and team-building

exercises by combining findings from various case studies and research. This could include explanations of Mentimeter's adaptability to various training situations, its role in encouraging participation and teamwork, and the advantages it may offer to businesses looking to improve their employees' career development.



6.2.2. Enhancing Communication and Collaboration:

(Chen, 2020) investigated the effective use of Mentimeter and other interactive presentation tools for virtual team communication. Most likely, the study will investigate how Mentimeter is used to help geographically dispersed team members communicate with one another. Incorporating interactive features like polls, surveys, or other engagement tools during online meetings and presentations could enhance communication. The study aims to uncover how Mentimeter addresses communication challenges in remote teams and fosters a more participative and collaborative work atmosphere.

Chen and colleagues will most likely investigate various aspects of Mentimeter's impact on teamwork and communication. This could be relevant to various aspects of team dynamics, from in-person presentations to virtual meetings. The research might delve into the ways in which Mentimeter's tools, like interactive quizzes, real-time polling, and feedback collection, enhance the dynamism and engagement of online discussions, fostering a more compelling and stimulating exchange of ideas.

Mentimeter's role as a tool for overcoming virtual collaboration challenges may also be addressed in this investigation. It might discuss how

well the tool encourages audience participation, increases engagement, and fosters collaboration—even in remote work environments.

6.3. Analysis and Finding

6.3.1. Educational Applications:

The study of the use of interactive presentation tools in educational settings revealed an important trend toward using technology to improve pedagogical practices. The positive effects of these tools on student participation and engagement were repeatedly emphasized in the reviewed studies. Different teachers reported higher levels of student interaction, making the classroom more active.

6.3.2. Engagement Enhancement:

An in-depth examination of engagement tools demonstrated the importance of students actively participating in class. Interactive discussions, quizzes, and real-time polling were all widely regarded as effective methods of piquing students' interest. The findings show that incorporating interactive components into instructional contexts is associated with increased levels of engagement.

6.3.3. Contribution to Improved Learning Outcome:

When the contributions of tools to learning outcomes were analyzed, a positive trend emerged. Research has consistently shown a link between improved student learning outcomes and the use of interactive presentation tools. It has been discovered that using these tools improves students' comprehension, information retention, and material application, all of which contribute to a more successful learning environment.

6.3.4. Corporate Application

The analysis focused on business settings, demonstrating how interactive presentation tools are becoming increasingly valuable assets in a variety of professional contexts. The Corporate Learning Institute's case study demonstrated how, when used strategically, these tools can improve employee training programs while also encouraging productive teamwork and communication.

6.3.5. User Experience and Acceptance:

The evaluation of user experience and acceptance demonstrated the importance of user-friendly interfaces and intuitive designs. Research has consistently shown that tools that include these features are more likely to be adopted and accepted by users. Positive user experiences were linked to increased satisfaction and overall effectiveness of interactive presentation tools in business and education settings.

To summarize, the literature review has revealed a wealth of information about the diverse effects of interactive presentation tools, such as Mentimeter, in a variety of contexts. Mentimeter has been shown in the reviewed studies to positively impact engagement levels while also actively transforming corporate communication dynamics and learning environments. Its real-time interaction features were extremely beneficial in encouraging students to participate actively, thereby increasing their engagement in learning environments. Research of various Application has also proven to be an effective tool for teamwork and efficient communication in business settings.

Studies have consistently shown that students' comprehension, retention, and application of knowledge have improved, emphasizing critical role in improving learning outcomes. Within the business sector, the tool proved effective in closing communication gaps, particularly in remote team settings, resulting in a more cooperative and interactive work environment.

Prospective research directions include a deeper investigation of the complex effects of interactive presentation tools on various learning preferences and styles. Investigating the long-term consequences of incorporating these tools into corporate and educational practices may provide valuable insights into knowledge retention and sustained engagement. More research is needed to determine how well these tools scale for large audiences and adapt to a variety of organizational and cultural settings.

Furthermore, the development of interactive presentation tools could prioritize improving user interfaces, adding new features, and addressing potential issues such as accessibility and integration with existing technological infrastructures. These tools can be constantly improved to better meet the changing needs of educators, presenters, and teams as technology advances, ensuring a smooth and powerful user experience.

7. Project Methodology

Kanban was chosen as the project technique for various reasons, including its flexibility, adaptability, and emphasis on visual management. Unlike other approaches that may have more strict structures or predetermined procedures, Kanban allows for a more organic and gradual approach to project management, which is ideal for the dynamic and ever-changing nature of React&Rise application development.

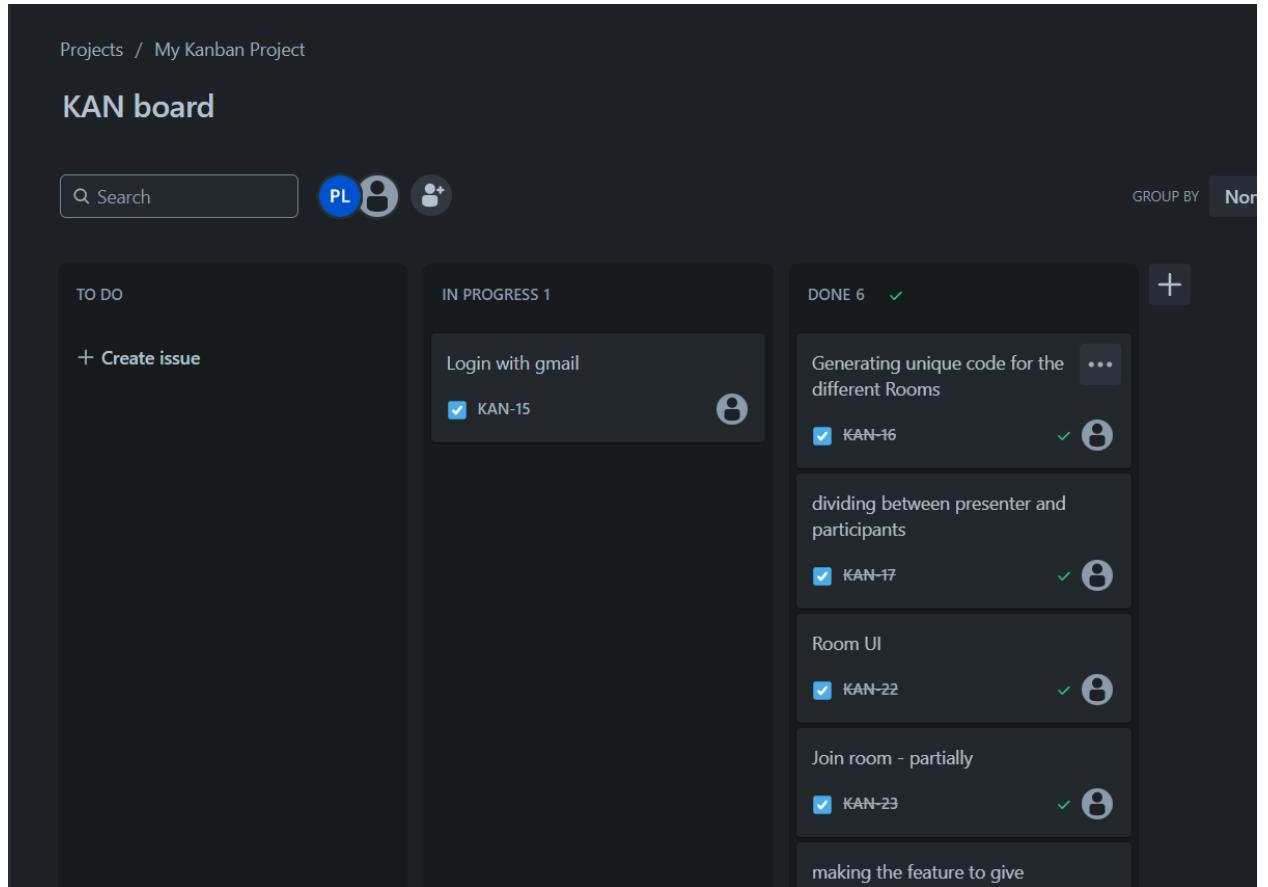


Figure 7 Kanban board

One of the primary motivations for using Kanban is its ability to give real-time visibility into project progress. Visual boards representing distinct stages of the development process, such as backlog, in progress, and finished tasks, allow team members to rapidly assess the status of work and identify possible bottlenecks or areas for improvement. This transparency encourages team members to collaborate and communicate, ensuring that everyone is on the same page about project goals and priorities.

Furthermore, Kanban's emphasis on minimizing work in progress (WIP) helps to avoid overloading team members and guarantees that tasks are finished in a timely way. Setting defined WIP limits for each stage of the workflow allows the team to maintain a consistent pace of work while avoiding multitasking, which can lead to inefficiencies and lost productivity. This method is especially useful for projects like React&Rise, where jobs can vary in size and complexity and priorities change over time.

Another reason to choose Kanban is its capacity to adapt to changing requirements. Unlike approaches that rely on predefined iterations or sprints, Kanban offers continuous delivery and allows the team to reprioritize activities in response to changing business demands or user input. This adaptability is critical for projects like React&Rise, where the development process may require multiple revisions and improvements to fulfill user expectations and market demands.

Furthermore, Kanban fosters a culture of continuous development by pushing teams to routinely reflect on their processes and discover opportunities for improvements. By performing regular retrospectives and making small adjustments, the team may incrementally improve their workflow and generate higher-quality results. This iterative approach is consistent with the iterative nature of software development and furthers the project's objective of providing a robust and user-friendly solution.

To summarize, Kanban was chosen as the project approach for React&Rise due to its adaptability, openness, and emphasis on continual development. By utilizing Kanban's visual management tools, WIP limitations, and adaptive approach, the team can efficiently manage project complexity, respond to change, and provide value to stakeholders in a timely way.

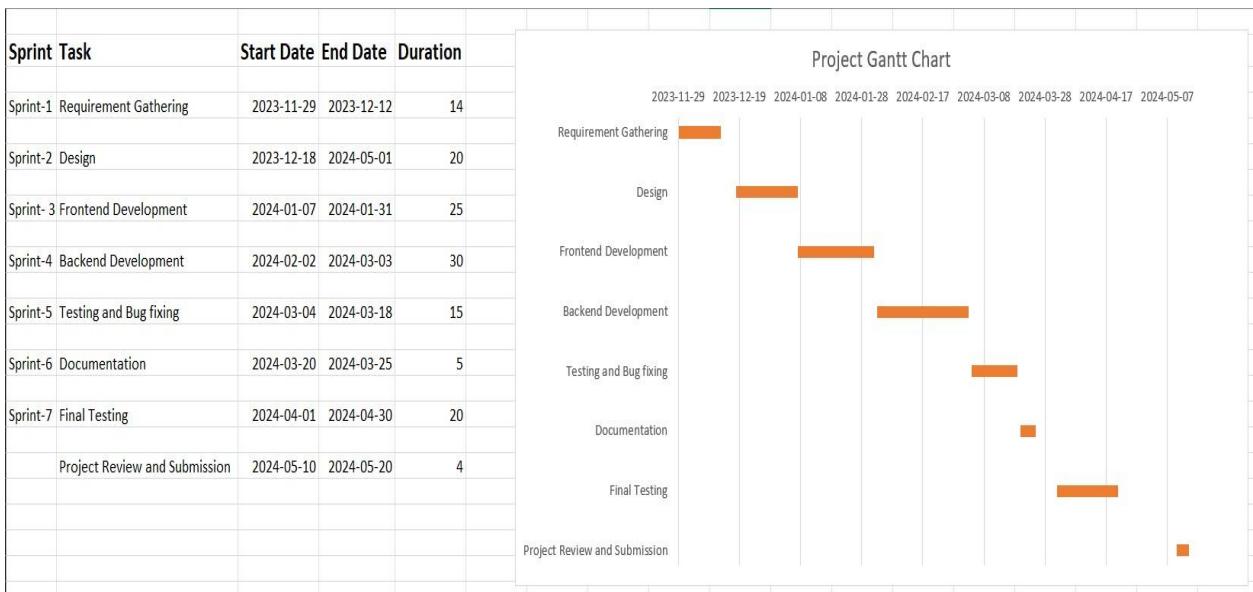


Figure 8 Gant Chart 1

Throughout the project, the Gantt chart was a useful tool for visualizing significant milestones and deliverables, giving a road map for progress, and assuring alignment with project goals. As the project proceeded, the Gantt chart gave a clear perspective of essential tasks and dates, allowing the team to prioritize work and deploy resources more efficiently. By referring to the Gantt chart on a frequent basis, team members were able to stay on track with project timeframes and quickly detect any deviations or delays. Furthermore, the Gantt chart enhanced communication and coordination among team members, resulting in seamless cooperation and prompt resolution of any difficulties or obstacles that emerged. Overall, the Gantt chart played a vital role in guiding the project's progress, ensuring that milestones were achieved in a timely manner and contributing to the successful completion of the React&Rise application.

8. Different Technology and Tools used for the project

8.1. Frontend

By using Vite.js alongside React.js to create the React&Rise frontend, the project takes a purposeful approach intended at increasing efficiency, speed, and alignment with modern development techniques. Vite.js, well-known for its fast bundling and serving capabilities, effortlessly interacts with the dynamic nature of React apps, promoting a development environment defined by quick feedback loops and quicker iterations. Using Vite's revolutionary module structure in combination with React's component-based design allows developers to fully realize the capabilities of both technologies. This synergy not only boosts productivity but also makes it easier to create highly performant and responsive user interfaces, which aligns nicely with the project's goals of providing a smooth and engaging experience.

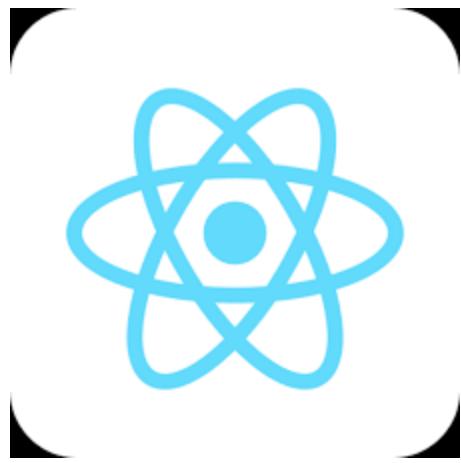


Figure 9 React

The inclusion of Chakra UI for styling and component libraries was motivated by its accessibility, customization options, and built-in support for responsive design, ensuring that the application remains user-friendly across different devices and screen sizes. Similarly, the integration of Framer Motion for animations and transitions enhances the visual appeal and interactivity of the application, contributing to a more engaging user experience.



Figure 10 Chakra UI

In addition to the front-end framework and build tool, the choice of npm as the package installer is supported by its widespread usage, vast package ecosystem, and strong dependency management features. The React&Rise project uses npm to access a multitude of pre-built packages and modules, which speeds up development and allows for the smooth integration of critical functionality like data fetching, routing, and form management. This intentional use of npm demonstrates a dedication to leverage established industry standards and best practices, assuring project compatibility across a wide range of development environments, and easing team communication.

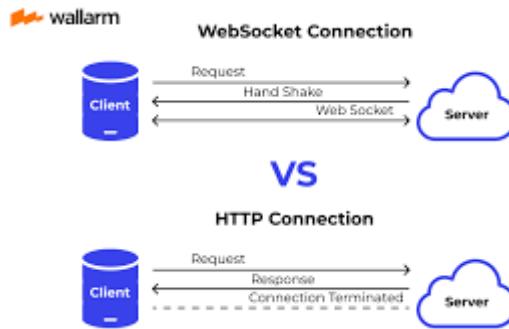


Figure 11 Websocket and Axios connection

In terms of dependencies, packages such as Axios and WebSocket were incorporated to facilitate data fetching and real-time communication with the backend server, enabling seamless interaction between the frontend and backend components of the application. Additionally, the use of Formik for form management simplifies form validation and submission,

while React Router DOM facilitates navigation within the application, enhancing usability and user flow.



Figure 12 Fa6

Furthermore, the usage of Font Awesome 6 (Fa6) as an icon package improves the visual aesthetics and user experience of the React&Rise application. Font Awesome, known for its extensive library of high-quality icons and complete modification capabilities, enables developers to easily add visually attractive and intuitive icons into their applications' user interfaces. By employing Fa6, React&Rise not only improves navigational clarity and visual hierarchy, but it also creates a unified and refined design language that connects with consumers, encouraging confidence and allowing for smooth interaction across several components and functionalities.

Formik emerges as a pivotal tool for managing form controls across various user interactions, including login, signup, password change, and other essential functionalities. Formik, renowned for its simplicity, flexibility, and robust feature set, serves as a comprehensive solution for handling form requirements, validation, and submission, streamlining the user experience and enhancing the reliability and integrity of data input processes.



Figure 13 React-chartjs

The usage of React-Chartjs for the creation of bar graphs and analytics inside the React&Rise frontend ecosystem is a strategic improvement aimed at providing users with intelligent data visualization capabilities and enabling educated decision-making processes. React-Chartjs, a React wrapper for Chart.js, was chosen due to its adaptability, robustness, and easy interaction with React.js, which precisely aligns with the project's goals of providing a dynamic and interactive user experience.

In essence, the strategic combination of Vite.js and React.js, npm as the package installer, and Font Awesome 6 as the icon package demonstrates a meticulous approach to frontend development marked by a harmonious fusion of cutting-edge technologies, industry-standard practices, and user-centric design principles. This complete synergy enables the React&Rise project to create an engaging, performant, and visually appealing user experience that exceeds expectations and establishes new standards in the field of anonymous communication platforms.

8.2. Backend

Django REST Framework (DRF) was chosen as the backend framework for the React&Rise project because of its powerful capabilities, rich documentation, and strong community support. DRF is a robust toolkit for creating RESTful APIs in Django that includes built-in support for serialization, authentication, and authorization, all of which are required for designing safe and scalable backend services. By adopting DRF, the React&Rise project gains a simplified development process, faster API development, and seamless connection with Django's ORM and authentication system, allowing for efficient data management and user authentication.

In addition to DRF, Django Channels is used for real-time data transfer, allowing bidirectional communication channels between server and client using WebSockets. This allows the React&Rise platform to provide real-time updates, notifications, and messaging services, hence increasing user engagement and participation. Using Django Channels, the project may incorporate features like live chat, real-time alerts, and collaborative document editing, which will improve the user experience and facilitate seamless communication among users.

Pip emerges as the dominant package management tool because to its simplicity, dependability, and huge package repository. Pip streamlines the installation and management of Python packages, ensuring that dependencies are handled fast and uniformly across several settings. This improves the project's maintainability, scalability, and compatibility with third-party libraries and frameworks, allowing for easy incorporation of new features and functions as the project grows.

Furthermore, JSON Web Tokens (JWT) are used for token-based authentication, which provides a stateless and secure method of authenticating users and allowing access to protected resources. JWT has multiple advantages, including scalability, simplicity of implementation, and compatibility with a variety of programming languages and platforms. Using

JWT, the React&Rise project can create strong authentication and authorization procedures, protecting sensitive user data and guaranteeing compliance with security best practices.



Figure 14 Python

Python is selected as the major programming language for both backend and frontend development, with Django serving as the backend framework for developing web applications. This strategic decision is motivated by Python's simplicity, readability, and adaptability, as well as Django's extensive collection of capabilities, such as built-in authentication, ORM, and admin interface, which expedite development and allow for quick prototyping.

Overall, the use of DRF, Django Channels, pip, JWT, and Python in the React&Rise project demonstrates a systematic approach to backend development that prioritizes efficiency, security, and scalability. Using these tools and approaches, the project can create a strong and feature-rich platform that satisfies the demands of its users while assuring maintainability, security, and compliance with contemporary development processes.

8.3. Version Control

The decision to use GitHub for version control in the React&Rise project stems from its status as the leading platform for collaborative software development, with a comprehensive suite of tools and features designed to streamline the version control process and promote efficient collaboration

among team members. GitHub provides a centralized repository for project code, allowing developers to easily monitor changes, manage revisions, and organize contributions.



Figure 15 GitHub

GitHub's straightforward user interface makes it easier to create, manage, and organize repositories. GitHub's pull requests, issues, and project boards create a unified and user-friendly platform for managing the software development lifecycle, from planning and development to testing and deployment. This promotes openness, accountability, and collaboration among the development team members, ensuring that all stakeholders are on the same page about project goals and priorities.

9. Artifact Design

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.

9.1. Class Diagram

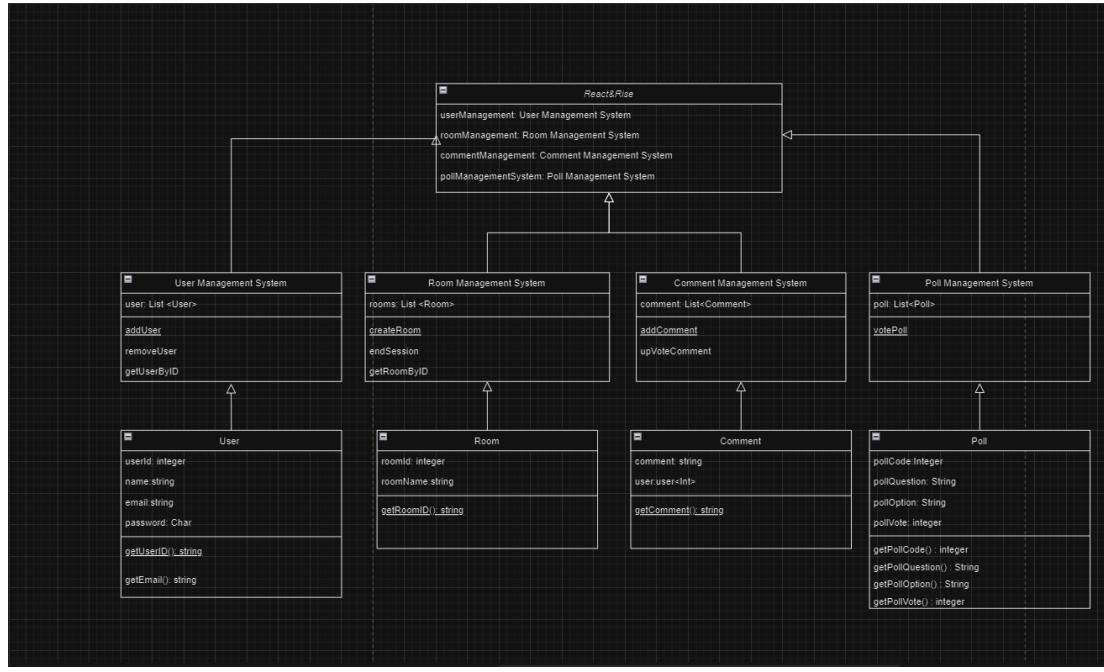


Figure 16 Class Diagram

This class diagram depicts the architecture of a software system made up of three major management systems: user management, room management, and comment management. Various systems are encased within a higher-level object known as "React & Rise," which acts as the principal swim lane container for arranging various subsystems.

The "React & Rise" entity is a swimlane that contains three major components, each representing a specific management system:

- User Management System
- Room Management System
- Comment Management System
- Poll Management System

9.2. Functional Decomposition Diagram (FDD)

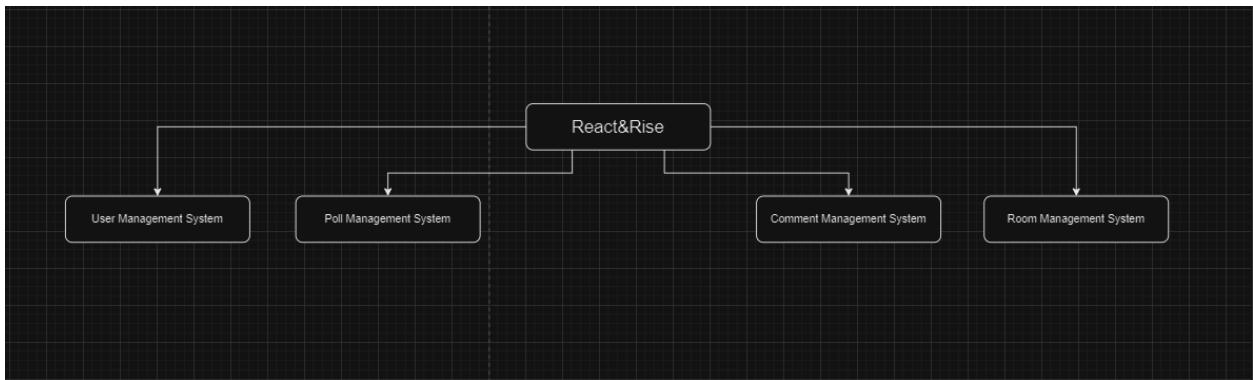


Figure 17 FDD Diagram 2

Legend

UMS – User Management System

PMS – Poll Management System

CMS – Comment Management System

RMS – Room Management System

Requirement Types:

FR – Functional Requirement

NFR – Non-Functional Requirement

UR – Usability Requirement

In total there are 4 types of system in this web application. First one is User

Management System:

9.3. User Management System (UMS)

Functional Requirements (FR)

Req. code	Requirement Description	Use Case	Priority
UMS-F-1.0	The system should allow the user to signup and login. Also, it should allow signup through Google.	User signup and login	Must Have
UMS-F-1.1	The system should allow the user to also signup login through Google.	User signup and login through social media	Could Have
UMS-NF-1.2	For security purpose while submitting the signup form the inserted data by the user must be encrypted.		Must Have
UMS-NF-1.3	Password inserted by the user must be a combination of alphabets, numbers and special characters		Must Have
UMS-F-1.4	The system should allow the user to reset their password in case they forget it.	Reset Password	Should Have
UMS-UR-1.5	After the password is reset the system must display an alert message stating your password is changed.	Alert password reset	Should Have

UMS-F-1.6	The user must be able to view every page available in the system	View pages	Must Have
UMS-F-1.7	The admin should be able to add and delete user in the system	Add, delete users	Must Have

9.3.1. Activity Diagram of the UMS

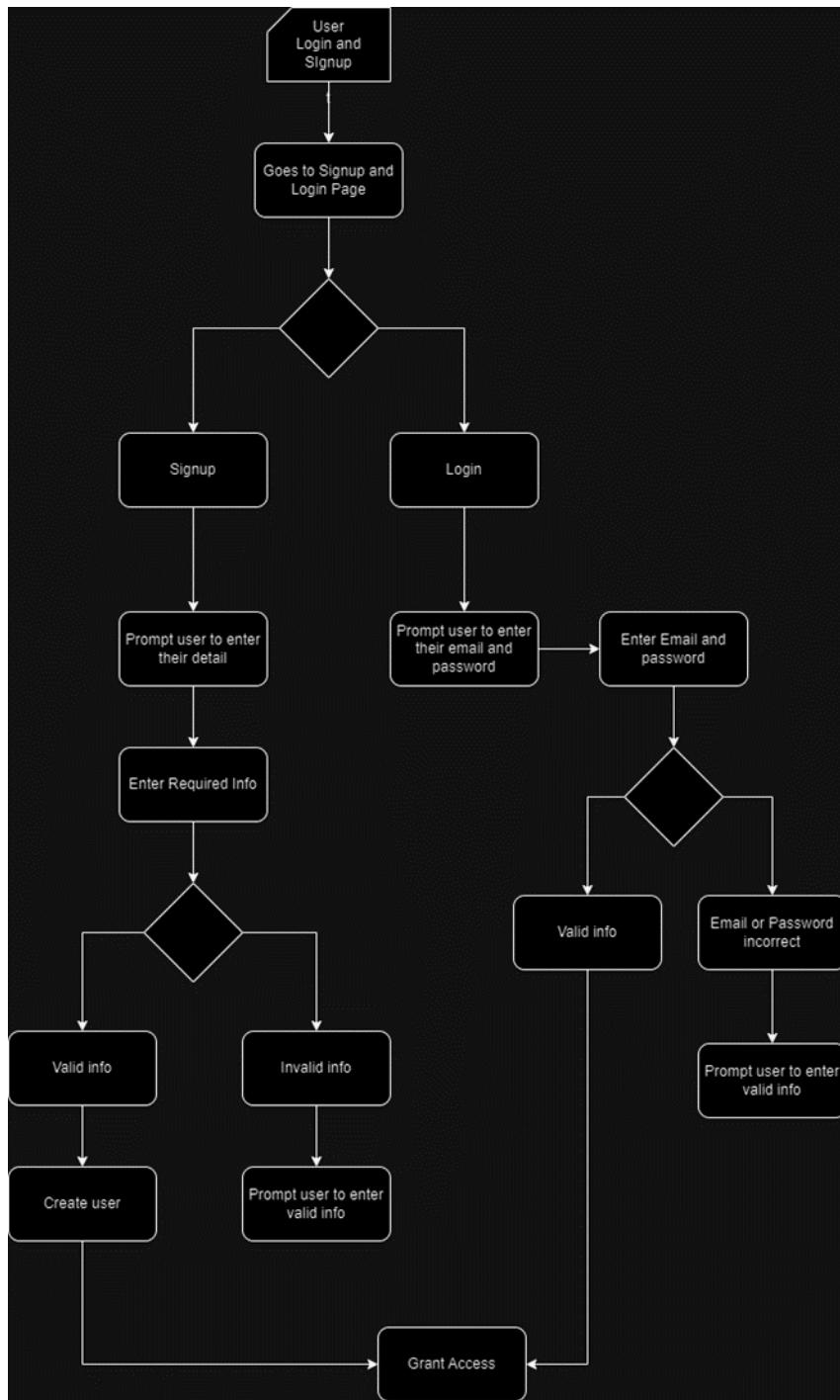


Figure 18 Activity Diagram of UMS 1

In this activity diagram, the user goes to the website and views the landing page. Then there is the option to go to the signup page or login page. If the

user is new and doesn't have an account, then it is required to sign up first. In signup users are required to add their information. Then the system will check if the information is valid or invalid. If the account is valid then a new user is created and then it is granted access and if the user enters the invalid information, then the error arises.

If the user is valid and already signed in, then user is required to enter the login credentials. If the credentials are valid then jwt token is created and then the access is granted. And if the login credentials are not correct then the error arises, and the user is given chance to correct it or if they don't have account it is required to sign in.

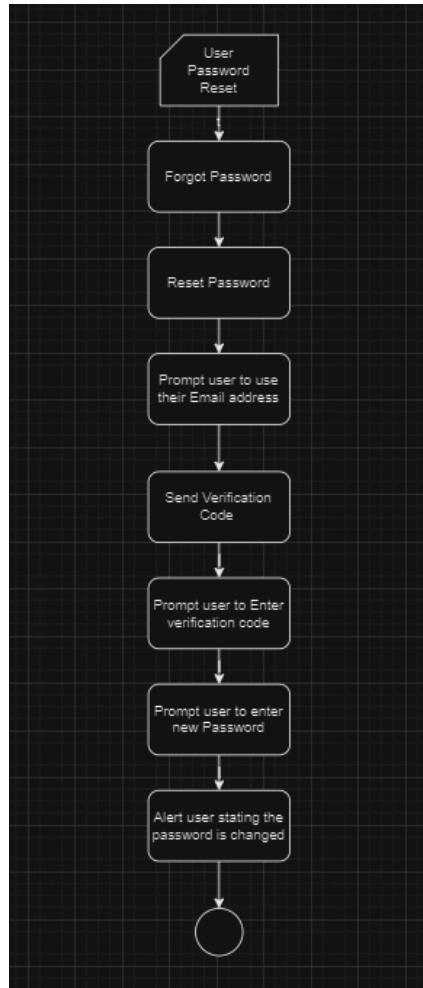


Figure 19 Activity Diagram of UMS 2

In the above activity diagram, it is shown that when the user forgot their password how to reset the password and login to their account again. First the user can go to the forget password section where the user is required to enter the Gmail account to send the password reset link. Then following that link users are required to change the password of their account and they can login with their new password.

9.4. Comment Management System:

Req. Code	Requirement Description	Use Case	Priority
CMS-F-1.0	The System should allow the participants to comment their questions.	Add discussion post	Must Have
CMS-F-1.1	The system should allow the participants to upvote if their question is same.	Add discussion post	Must Have
CMS-UR-1.2	The written discussion post with date of upload must be visible to other participants and Presenter	View discussion post	Could Have
CMS-F-1.3	The system should allow Presenter to mark it as read question.	View discussion post	Must Have
CMS-F-1.4	The Presenter and Admin should be able to see the number of comments and Number, or user engaged	View discussion post	Must Have

9.4.1. Activity Diagram of CMS

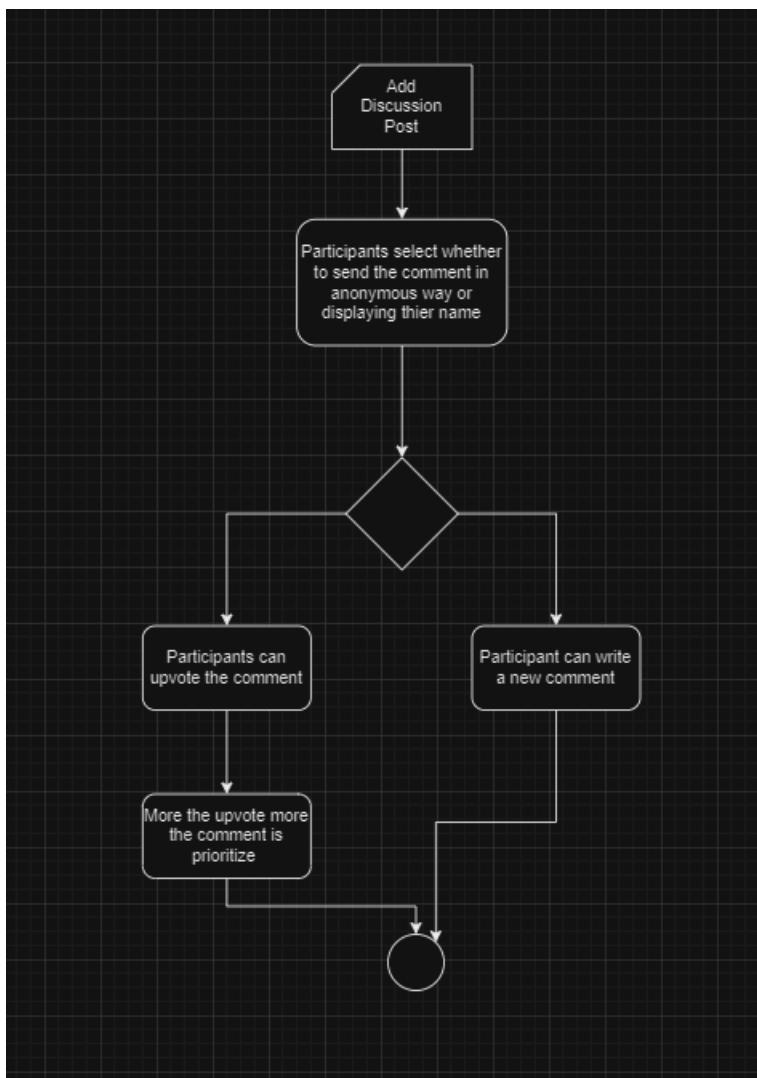


Figure 20 Activity Diagram of CMS 1

In this activity diagram, A user can make a desired room with certain question and participants can write a question, comment and upvote the questions if it is shared. And they can simply exit the room if they want and after the session ends the user will simply end the session.

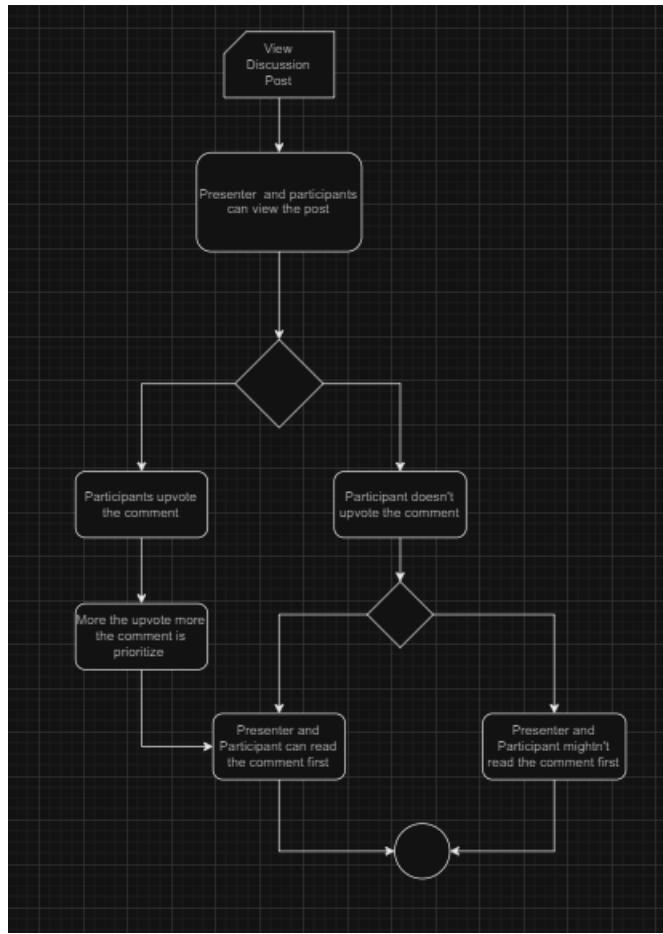


Figure 21 Activity Diagram of CMS 2

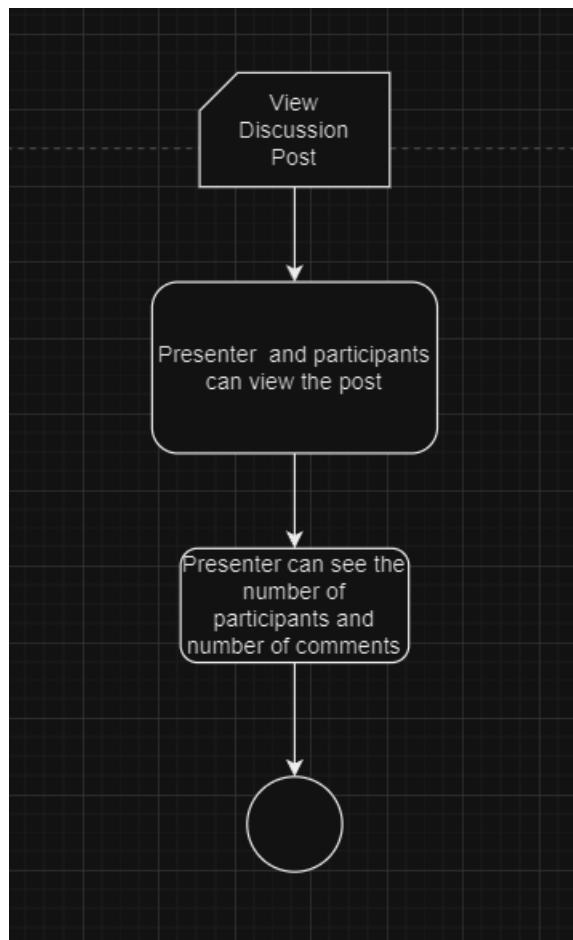


Figure 22 Acrivity Diagram of CMS 3

In the above Activity diagram both participant and presenter can see the comments or questions that the participants have sent, and participants can interact with the post by upvoting and the more the vote it will get prioritized in the presenter view.

9.5. Room Management System (RMS)

Req. Code.	Requirement Description	Use Case	Priority
RMS-F-1.0	The System should allow the user to create the room for a discussion	Room Creation	Must Have
RMS-F-1.1	If the user is not logged in then they are only allowed to enter the room not to create	Room Creation	Must Have
RMS-F-1.2	If the user creates the room that user should give access to mark the question as read and other option	Room Creation	Must Have
RMS-F-1.3	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
RMS-F-1.4	If the user has created the room, then the user can see every status of the room that is created	Room Creation	Must Have

9.5.1. Activity Diagram

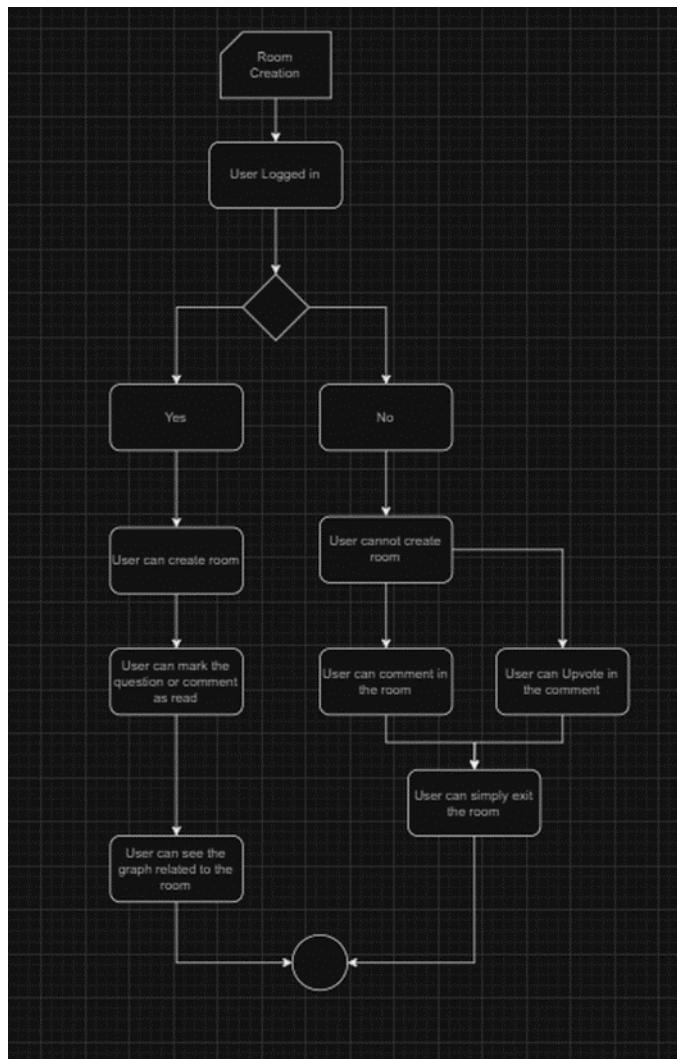


Figure 23 Activity Diagram RMS 1

In the above Activity diagram, the first user needs to login for the creation of the room and if the user is not logged in then the user can only enter the code for the room and enter the room for just commenting. If the user is participant, then the user can upvote the comment as well and simply exits the room after the session is over. If the user is presenter, then the user can create the room and see the message written by the participant and respond to the message. The most upvoted message will be prioritized at first and the least will be at last. After the session is over then the user who created the room will be able to see the stats of the room like how many people joined the session, how many people commented and responded to the session and many more.

9.6. Poll Management System

Req. Code.	Requirement Description	Use Case	Priority
PMS-F-1.0	The system should allow logged-in users to create a poll.	Create poll	Must Have
PMS-F-1.1	The system should require the user to mention a question and its related options.	Create poll	Must Have
PMS-F-1.2	The system should allow a maximum of 8 options and a minimum of 2 options per question.	Create poll	Must Have
PMS-F-1.3	The system should allow users to add multiple questions and their respective options.	Create poll	Must Have
PMS-UR-1.4	Users not logged in should be able to enter a poll code to access the polling room.	Enter poll room	Must Have
PMS-F-1.5	Non-logged-in users should be able to vote on their desired option in the poll.	Vote in poll	Must Have
PMS-F-1.6	The voting option should be disabled for a user once they have voted to prevent multiple voting from the same user.	Vote in poll	Must Have

9.6.1. Activity Diagram

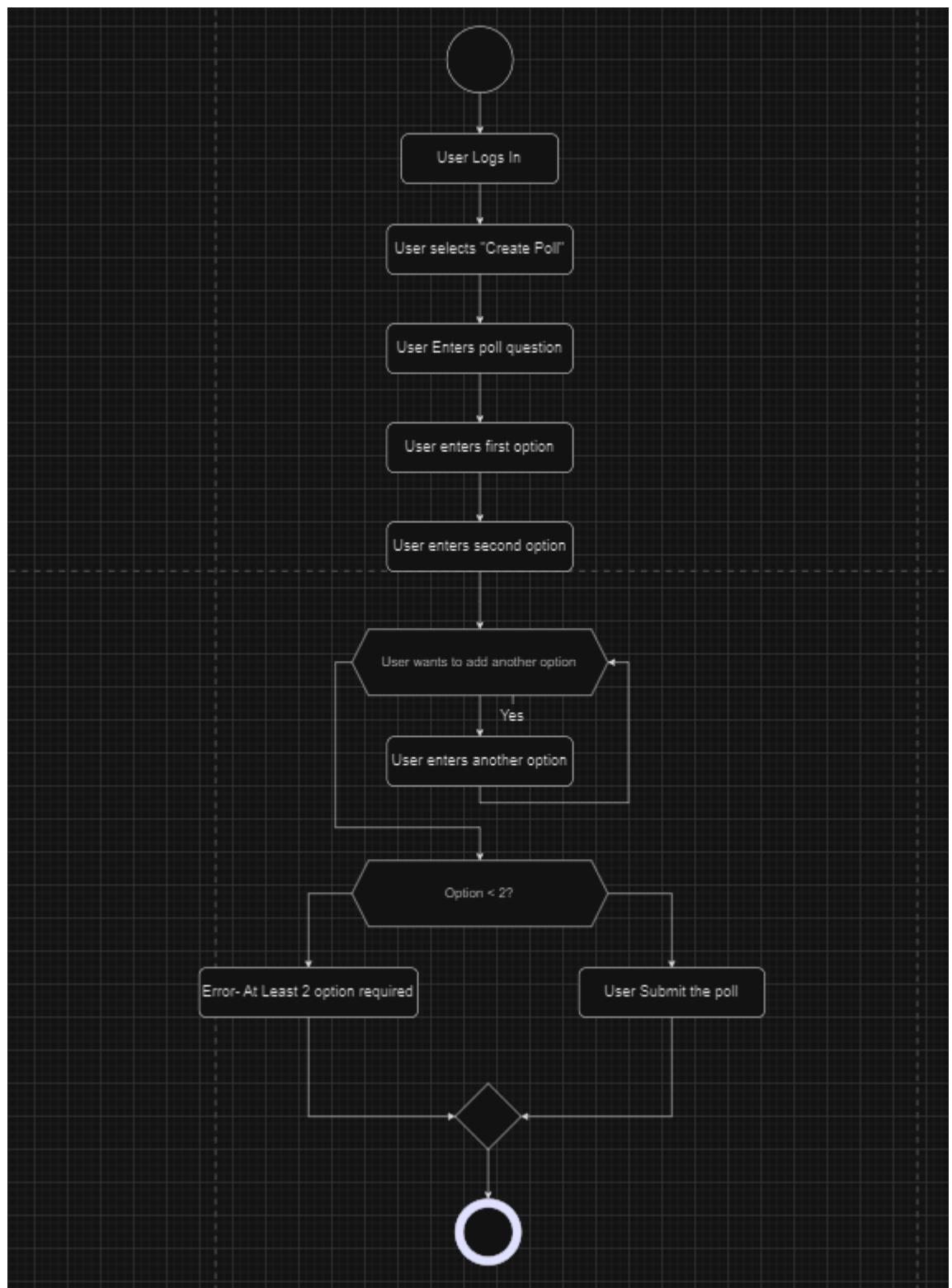


Figure 24 Activity Diagram of PMS 1

The above activity diagram depicts the steps a user takes to establish a poll after logging into the system. Initially, the user signs in and chooses the "Create Poll" option. They then enter a poll question. The user must submit at least two alternatives for the poll; the method assures this by requiring the user to add options one at a time. If the user tries to add fewer than two options, an error notice appears prompting them to add more. If the user attempts to add more than eight options, an error notice asks them to delete the extra options. After entering a valid number of alternatives (between 2 and 8), the user may submit the poll, which completes the poll creation process.

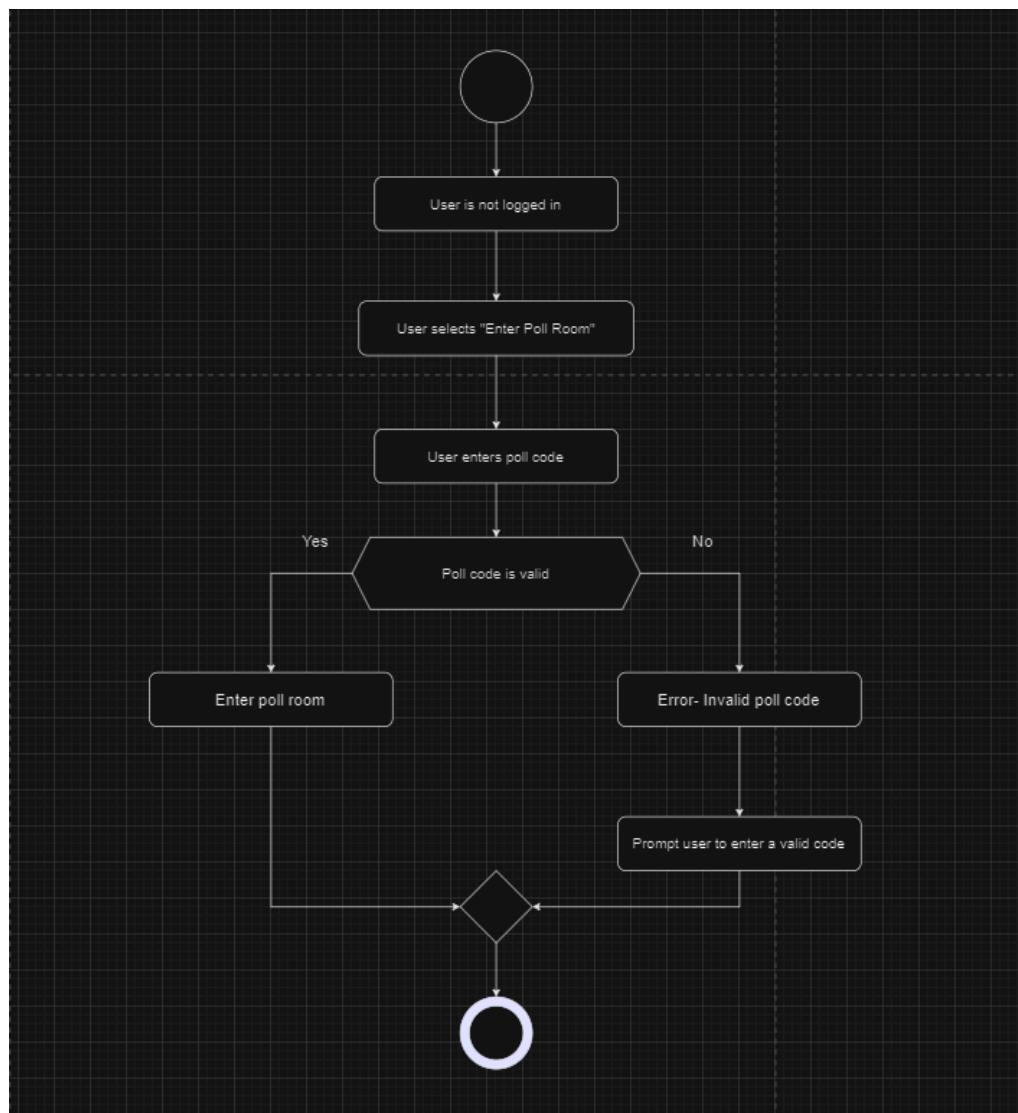


Figure 25 Activity Diagram of PMS 2

The above activity diagram depicts the steps a user takes to enter a poll room without logging in. The procedure begins with the user selecting to enter a poll room and inputting the poll code supplied. The system then validates the poll code you submitted. If the code is legitimate, the user receives admission to the poll room, where they may take part in the poll. If the code is invalid, the system shows an error notice and requests the user to provide a valid code, guaranteeing that only those who have the right code may access the poll.

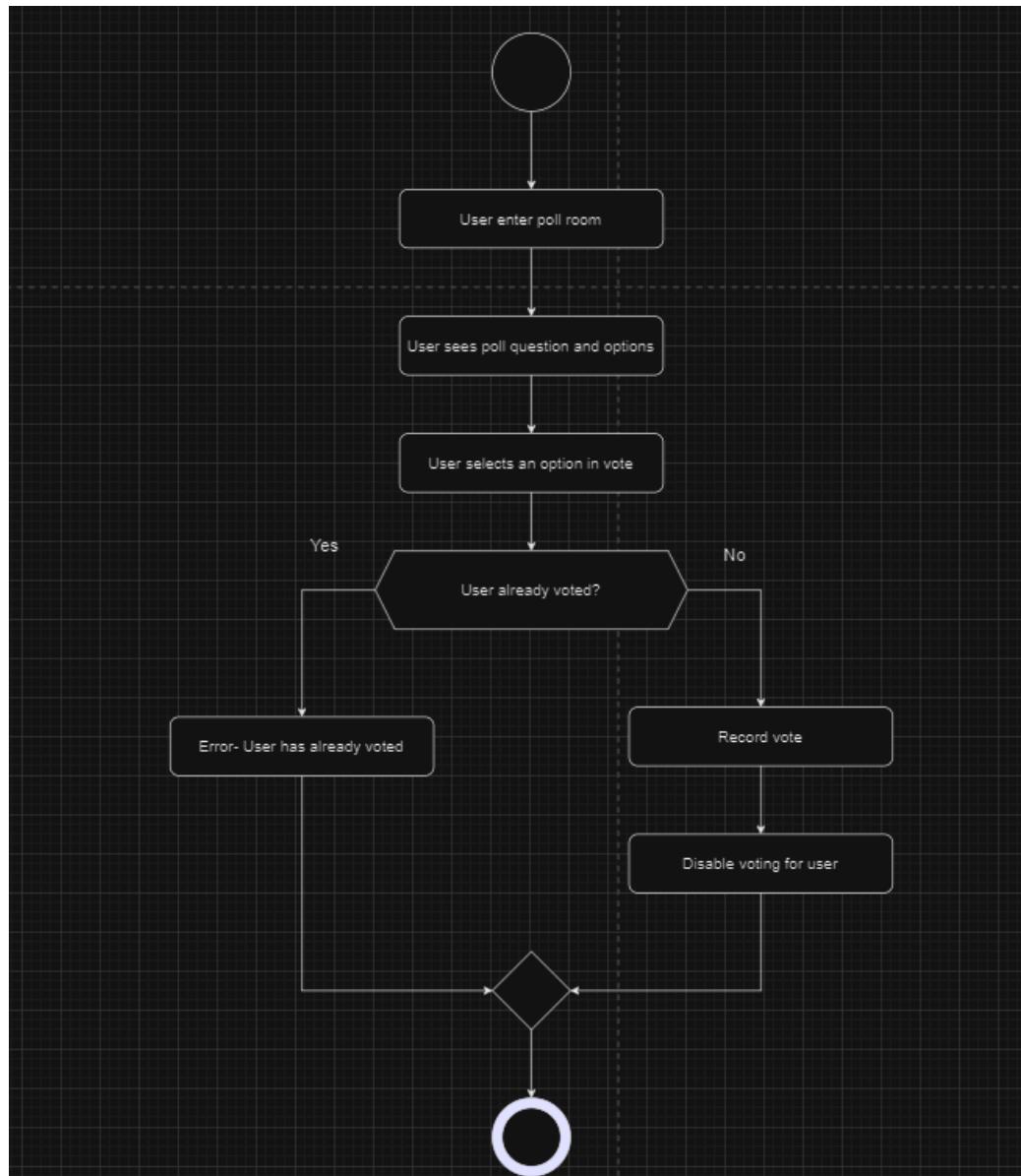


Figure 26 Activity diagram of PMS 3

The above activity diagram displays the voting procedure in a polling room. When the user enters the poll room, they are shown the poll question and potential alternatives. The system determines if the user has already voted. If the user has previously cast a vote, an error notice appears, stopping them from voting again. If the user has not already voted, they choose their preferred option and the system registers their vote. After voting, the system blocks future voting for that user to guarantee that each person only has one vote. This method maintains the poll's integrity and impartiality by barring multiple votes from the same user.

9.7. Entity Relationship Diagram (ERD)

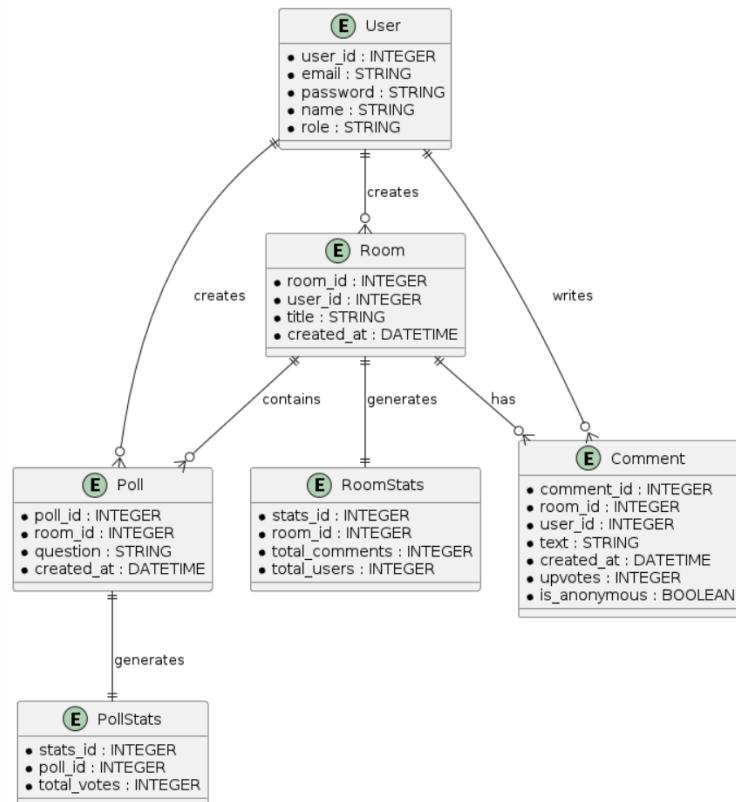


Figure 27 ER Diagram

9.8. Testing

The web application was successfully constructed, and test cases were written to evaluate each capability and compare the expected and actual outcomes. The different testcases that I will use in my application are:

9.8.1. Test Case 1:

Case 1	Registering the user into the system
Steps followed	Registering user with wrong passwords, wrong password length, correct passwords.
Expected result	Display error when passwords don't match, Display error when password have less than 8 characters, successful signup & show success message, successful signup via google
Actual Result	Error displayed when passwords don't match, Error displayed when password length is less than 8, Redirected to login page along with success notification,
Conclusion	All tests are successful.

Signup

Fullscreen

Prashanna lohani

Email

NP03CS4S220275@heraldcollege.edu.np

Password Password must be at least 8 characters

.....



Confirm Password

.....



I accept the [Privacy Policy](#) and [Terms of service](#)

Sign Up

Already have an account? [Login](#)

Figure 28 Registering less than 8 character password error

Signup

Fullscreen

Prashanna lohani

Email

NP03CS4S220275@heraldcollege.edu.np

Password

..... 

Confirm Password Passwords do not match

..... 

I accept the [Privacy Policy](#) and [Terms of service](#)

Sign Up

Already have an account? [Login](#)

Figure 29 Registering invalid two passwords

Signup

Fullscreen

Enter your Fullname

Email

Enter your email address

Password

Enter your password



Confirm Password

Re-enter your password



I accept the [Privacy Policy](#) and [Terms of service](#)

Sign Up

Already have an account? [Login](#)



Account created.



You can access your login with your account now.

Figure 30 Signup Successful

Select signup to change								ADD SIGNUP +
		<input type="text"/> Search						
Action:	—	Go	0 of 2 selected					
#	ID	EMAIL	FULL NAME	IS ACTIVE	IS STAFF	IS SUPERUSER	DATE JOINED	LAST LOGIN
	2	NP03CS4S220275@heraldcollege.edu.np	Prashanna Iohani	✓	✗	✗	May 20, 2024, 8:13 a.m.	-
	1	plohani2003@gmail.com	Prashanna	✓	✓	✓	May 13, 2024, 4:32 a.m.	May 20, 2024, 8:15 a.m.

Figure 31 Django panel showing new Sign up

9.8.2. Test case 2:

Case 2	Login the user into the system
Steps followed	Logged in with incorrect password, logged in with correct credentials
Expected result	Show error message of password less than 8 characters, Show error message with incorrect credentials, Login and show success message and redirect to dashboard
Actual Result	Error message shown when password length is less than 8 characters, Error message shown when password or email is incorrect, Login successful & showed success message while redirecting to the login page
Conclusion	All tests are successful

Login

Email

plohani2003@gmail.com

Password

.....



[Forgot your password?](#)

Login

New User? [Signup](#)



Login failed



Please enter correct Email or Password.

Figure 32 Logged in with incorrect Credentials

Login

Email

plohani2003@gmail.com

Password

.....



Forgot your password?

Login

New User? [Signup](#)

Login Successful.

Welcome.

Figure 33 Login successful message

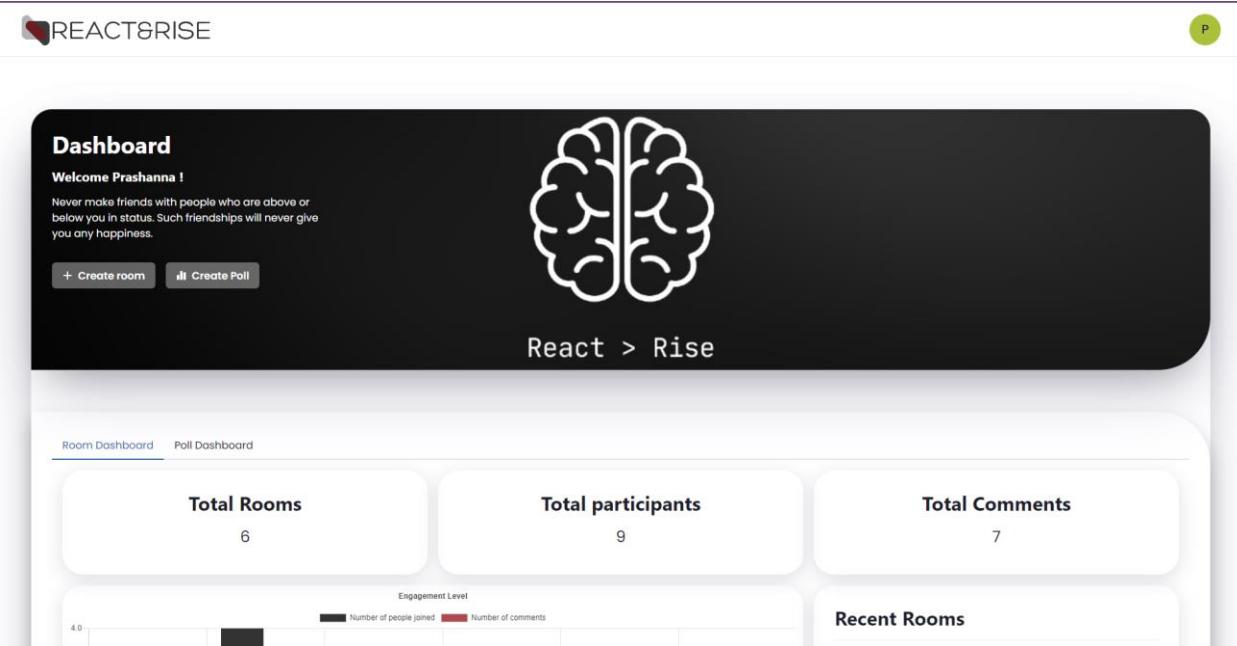


Figure 34 Redirected to the Dashboard after login

9.8.3. Test Case 3:

Case 3	Making new Room
Steps followed	Create Room button and enter the required field and generate the Room code
Expected result	Show room created message with the room code and redirect to the room page of the respected code.
Actual Result	Room created, Room code generated and redirected to the room of that code
Conclusion	All tests are successful

Create Room

Room title:

Number of participants:

If you don't want to put a limitation, leave it blank.

Create

Join Room

Enter room code:

Enter

Figure 35 Room Create button clicked

Create Room

Room title:

Number of participants:

If you don't want to put a limitation, leave it blank.

Create

Figure 36 Room credential entered

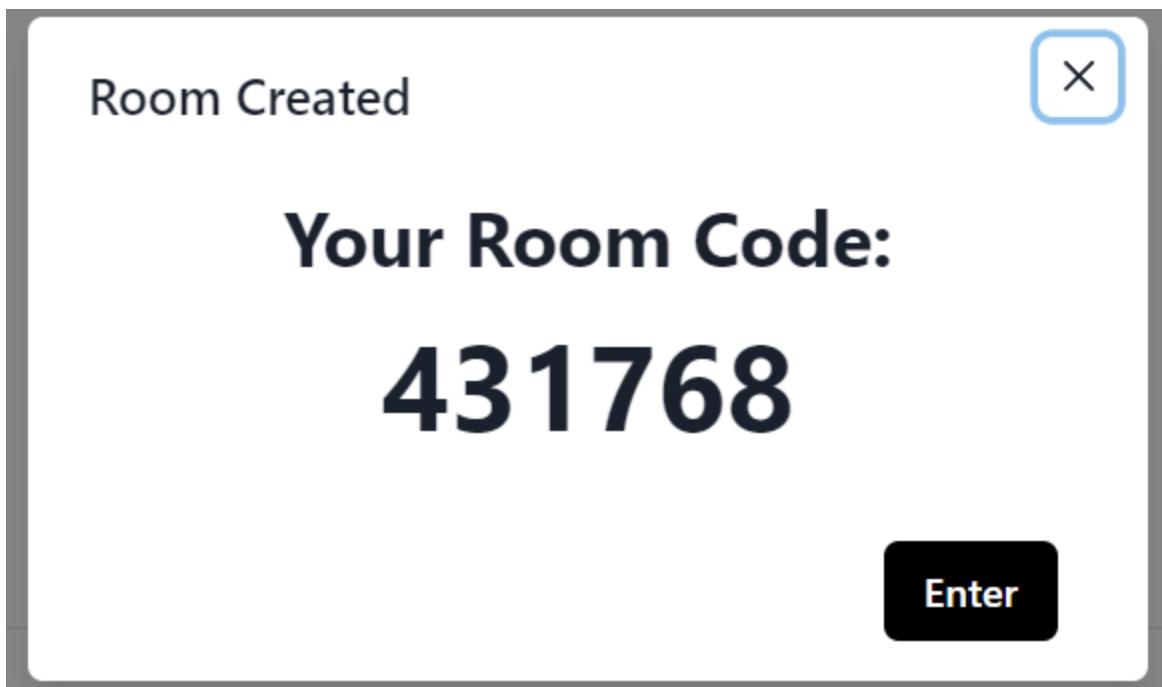


Figure 37 Room code generated after Room creation

A screenshot of a web browser window. The address bar shows the URL "http://REACT&RISE/room/431768". Above the address bar, there is a small red heart icon and the text "REACT&RISE". To the right of the address bar is a green circular badge with a white letter "P". The main content area displays the room code "431768" in bold black text. Below it, there is a section titled "Comments and Questions" which is currently empty. On the right side, there is a summary of session details: "Number of People joined: 0" and "Number of comments: 0". At the top right of the content area is a small black button labeled "End session".

Figure 38 Redirected to the room of the code

9.8.4. Test Case 4:

Case 4	Allow different user to enter code from homepage and display message
Steps followed	New user will join the room and write the message and displayed in both user's page
Expected result	Show the message entered by other user and end the session so that after the session is end no one can join.
Actual Result	Message was displayed, user were able to join and after the session was ended error message was displayed
Conclusion	All tests are successful

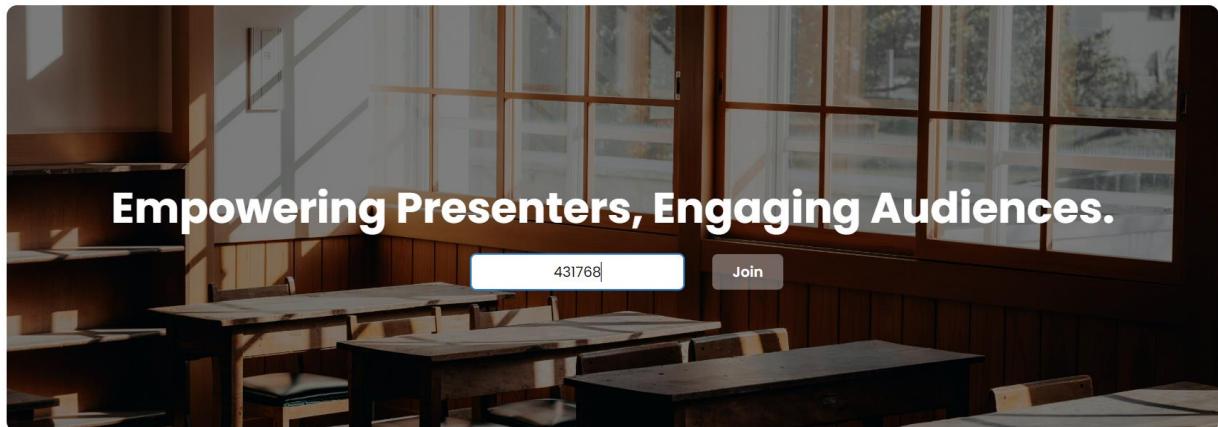


Figure 39 Differnt user entering the room code to enter



Figure 40 Redirecting to the room for participant

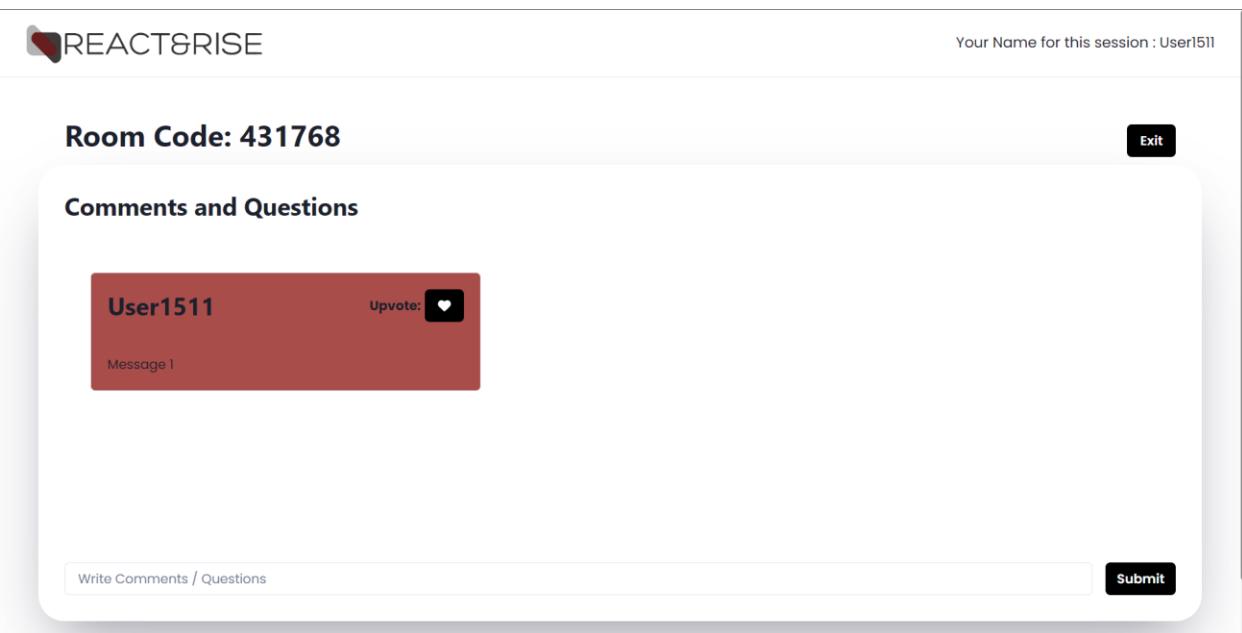


Figure 41 Displaying message from the participant view

The screenshot shows a message card for 'User1511'. The card has a red background. At the top left is the user's name 'User1511' and at the top right is 'Upvote: 0'. Below the name is the message content: 'Message 1'. At the bottom of the card is a black button labeled 'Read'. In the top right corner of the main interface, there is a yellow circular badge with the letter 'P'.

Room Code: 431768

Comments and Questions

Number of People joined: 1
Number of comments: 1

End session

Figure 42 Displaying message from presenter view

Action:	———	Go	0 of 7 selected					
■	ROOM ID	USER	ROOM NAME	NUM OF PEOPLE	LIMIT PEOPLE NUM	NUM OF COMMENTS	CREATED AT	ACTIVE
■	431768	plohani2003@gmail.com	Test Project	1	23	1	May 20, 2024, 8:26 a.m.	☒

Figure 43 Ending the session

The screenshot shows a large image of a room with wooden walls and large windows. Overlaid on the image is the text 'Empowering Presenters, Engaging Audiences.' in white. At the bottom of the image are two buttons: '431768' and 'Join'. Below the image, the text 'Why React&Rise?' is displayed. A red error message box is visible, containing the text 'Error' and 'Session already ended'. At the very bottom of the page, there is a small, partially visible footer text: 'React&Rise is the only platform that combines a cutting-edge developer experience with an intuitive UI for non-technical users.'

REACT&RISE

Login **signup**

Why React&Rise?

Error
Session already ended

React&Rise is the only platform that combines a cutting-edge developer experience with an intuitive UI for non-technical users.

Figure 44 Error message displayed after ending the session

9.8.5. Test Case 5:

Case 5	Show the analytics of the room and total analytics
Steps followed	Go to dashboard and view the analytics of the recent room
Expected result	Show bar graph with the number of people joined and number of comments
Actual Result	Bar graph and recent room displayed
Conclusion	All tests are successful

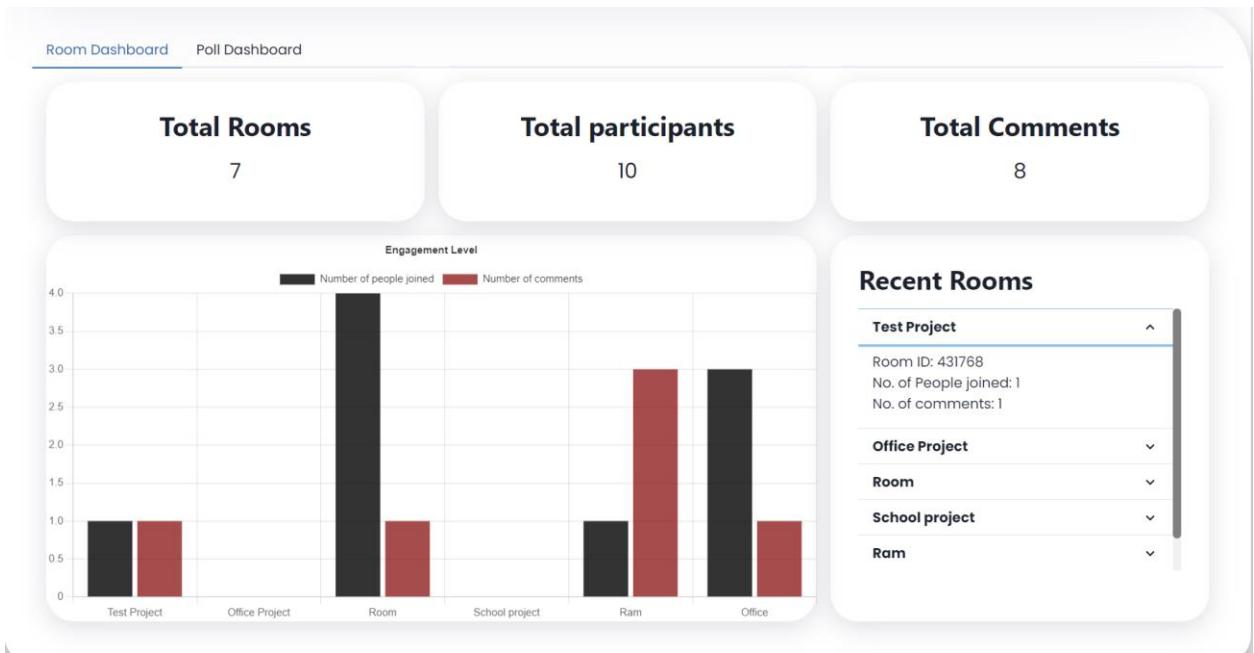


Figure 45 Analytics of recent room

9.8.6. Test Case 6:

Case 6	Create poll and enter the question and option dynamically
Steps followed	Create the poll and show the poll code, can enter question and the option, can add, and delete more option and can add more question, Present the analytics of the poll in presentation view
Expected result	Poll created with poll code, Question and option can be edited and can add and delete the option, can add and delete the question, shows the room analytics.
Actual Result	Bar graph and recent room displayed
Conclusion	All tests are successful

The screenshot shows a user interface for creating a poll. At the top, there's a logo with a heart icon and the text 'REACT&RISE'. In the top right corner, there's a yellow circular badge with a 'P' and a 'Present' button. Below the header, the text 'Poll Code: 241827' is displayed, along with an 'End session' button. A 'Ranking' section is visible, featuring a 'Present' button. The main area is titled 'Write your question' and contains two input fields labeled 'Option 1' and 'Option 2'. Below these fields is a green button labeled '+ Add option'. At the bottom of the form are two buttons: a black 'Submit' button and a green '+ Add Question' button.

Figure 46 Poll created with the poll code

Ranking

Question 1

1. Yes

2. No

+ Add option

Submit **+ Add Question**

This screenshot shows a digital form interface. At the top right is a 'Present' button. Below it is a section titled 'Ranking' with a question 'Question 1'. The question has two options: 'Yes' and 'No'. A green button labeled '+ Add option' is visible. At the bottom are 'Submit' and '+ Add Question' buttons.

Figure 47 Question and option are added

Ranking

Question 1

1. Yes

2. No

3. Option 3

4. Option 4

+ Add option

Submit **+ Add Question**

This screenshot shows a digital form interface. At the top right is a 'Present' button. Below it is a section titled 'Ranking' with a question 'Question 1'. The question has four options: 'Yes', 'No', 'Option 3', and 'Option 4'. Each option has a small trash icon to its right. A green button labeled '+ Add option' is visible. At the bottom are 'Submit' and '+ Add Question' buttons.

Figure 48 New option are added

Question 1

1. Yes

2. No

3. Option 3

[+ Add option](#) [Delete Question](#)

Write your question

1. Option 1

2. Option 2

[+ Add option](#) [Delete Question](#)

Figure 49 New Question is added

Join at
React&Rise.com
241827

Active Poll

Question 1

Bar Graph

maybe No Yes



Figure 50 Question 1 and 2 is shown in presentation view

9.8.7. Test Case 7 :

Case 7	Participants can join the room from homepage and can able to vote in the option, after voting option other option will be disabled, end session and show error
Steps followed	Go to home and enter the poll code and vote in one option , other user end the session and participants cannot join
Expected result	Poll Code entered, Poll room entered, Click in one option, option gets disabled, end the session and show error message
Actual Result	Poll Code entered, Poll room entered, Click in one option, option gets disabled, error message shown after the session is end
Conclusion	All tests are successful

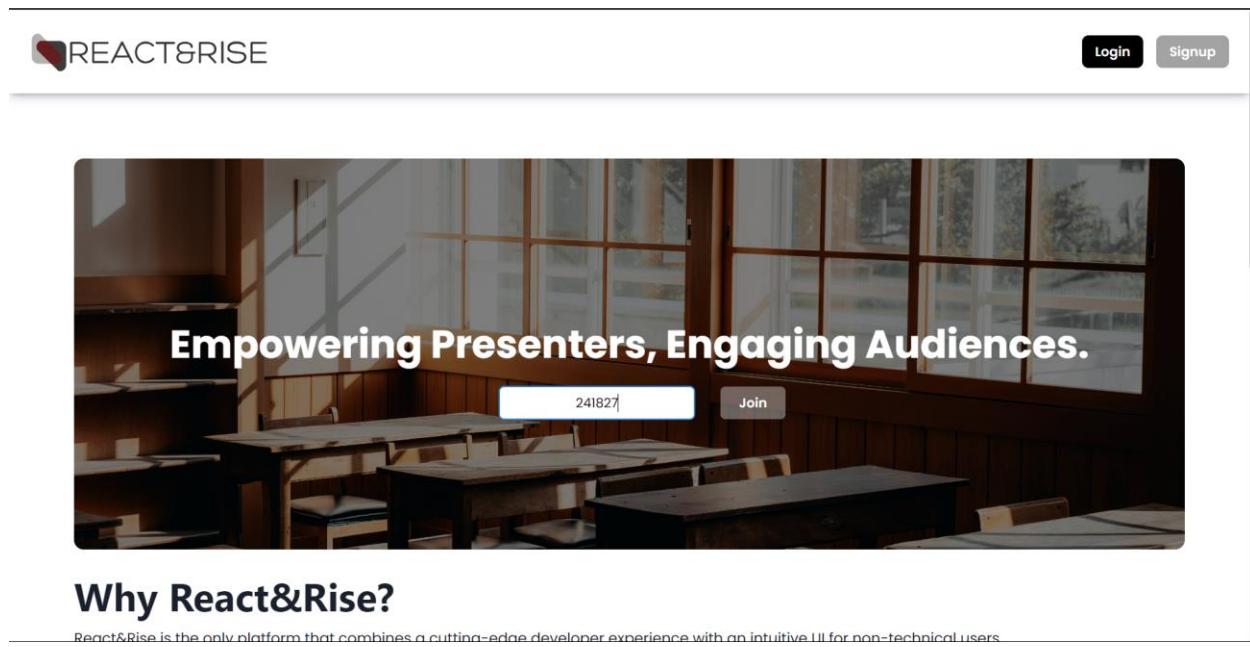


Figure 51 Entering poll code by another user

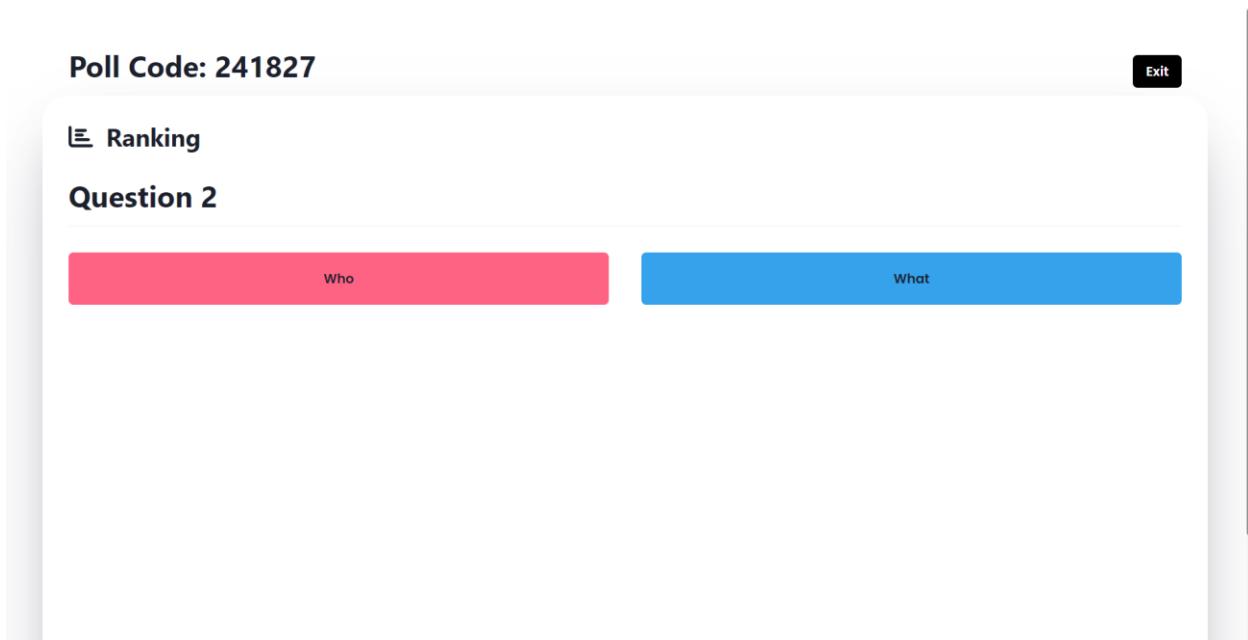


Figure 52 Room entered with the option

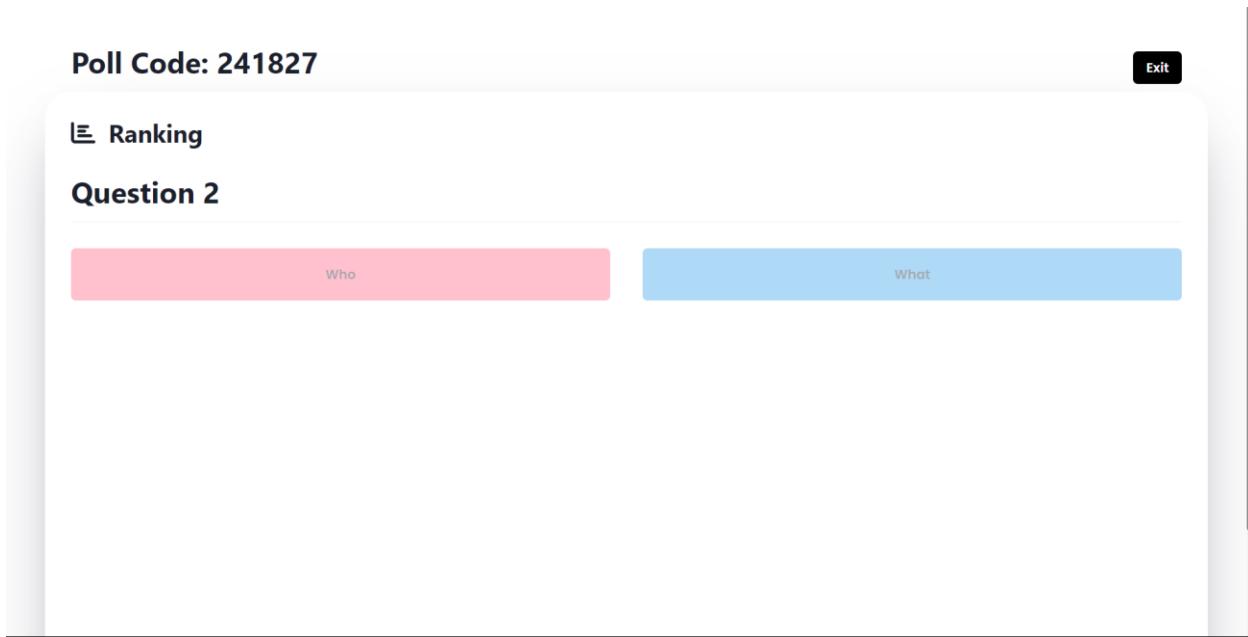


Figure 53 Option gets disabled after selecting one

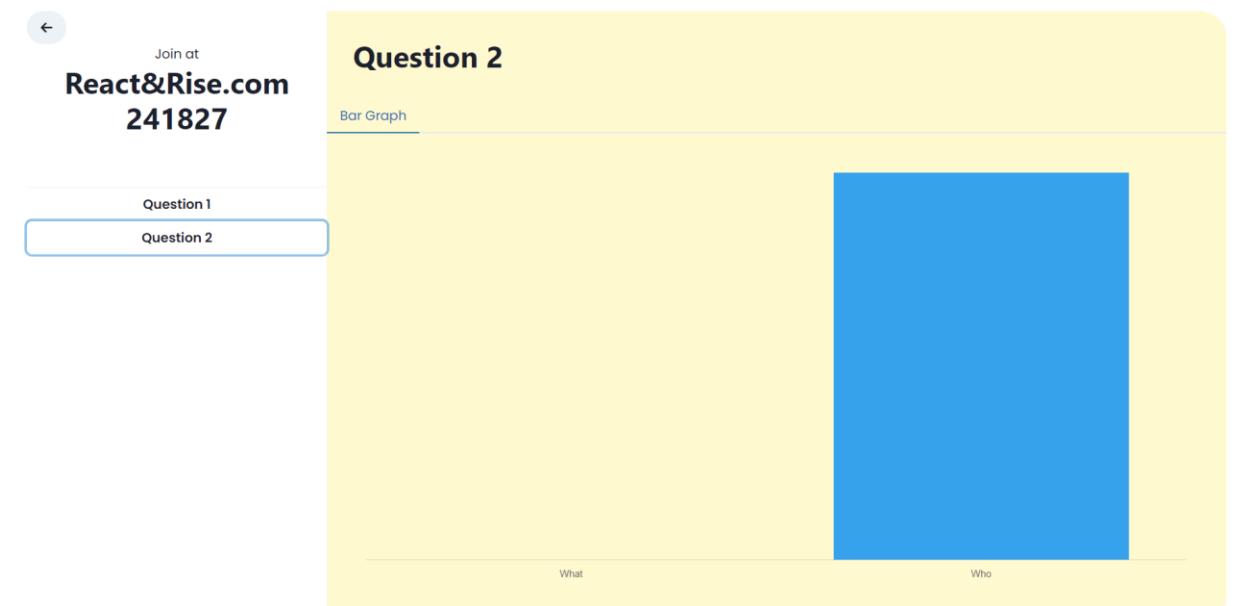


Figure 54 Result shown in presenter view

POLL CODE: 241827

Ranking

Question 1

1. Yes
2. No
3. maybe

+ Add option

Submit + Add Question

Figure 55 User ending the session

POLL ID	USER	NUM OF PEOPLE	ACTIVE
241827	plohani2003@gmail.com	1	✗

Figure 56 Active status false

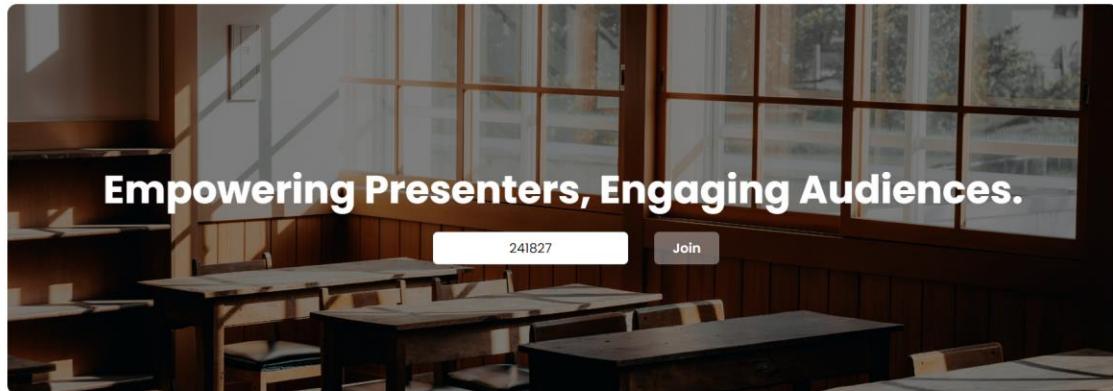


Figure 57 Error message shown

9.8.8. Test case 8:

Case 8	Send feedback to the React&Rise
Steps followed	Go to home Contact us section, write the credential and message and send it to the gmail.
Expected result	Email is received
Actual Result	Poll Code entered, Poll room entered, Click in one option, option gets disabled, error message shown after the session is end
Conclusion	All tests are successful

Contact Us

Name

Email

Message

This application is nice and it is very useful.

Send

Contact: reactrise23@gmail.com Privacy policy Terms of Service 2024 React&Rise. © All right reserved.

Figure 58 Writing an feedback

About us

Our goal is to streamline the process of developing modern web applications, making it quicker, simpler, and more enjoyable. We firmly believe that exceptional software should be within reach for everyone, not just those with technical expertise. That's why we've developed a platform that enables both developers and non-technical individuals to create and deploy stunning, efficient applications without the complexities of infrastructure management.

Contact Us

Name

Email

Message

Send

Contact: reactrise23@gmail.com 2024 React&Rise. © All right reserved.

Figure 59 Mail sent message displayed

The screenshot shows an email inbox interface. At the top, there is a search bar labeled "Search mail" and a settings gear icon. Below the search bar are standard email navigation icons: back, forward, reply, delete, etc. The main content area displays an incoming email titled "Contact Form Submission" from the sender "reactrise23@gmail.com". The message body contains the following text:
This application is nice and it is very useful.
Name: Prashanna lohani
Email: NP03CS4S220275@heraldcollege.edu.np

At the bottom of the email view, there are three buttons: "Reply", "Forward", and a smiley face icon.

Figure 60 feedback received from the email

9.8.9. Test Case 9:

Case 8	Check the setting page, Change name and show the name changed message, change password and show the password changed message, change background from light to dark.
Steps followed	Go to the setting page and change the name, change the password and change from light mode to dark mode
Expected result	Name changes in another login, password changes and background changes
Actual Result	Name changed in another login, password changed and background changed.
Conclusion	All tests are successful

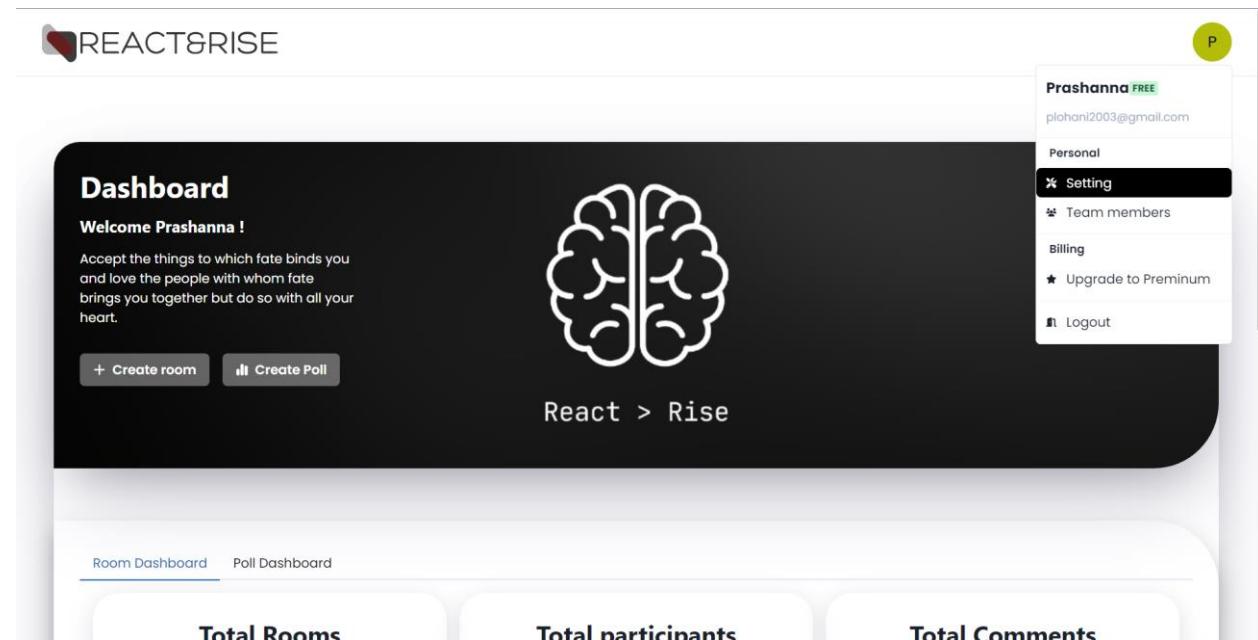


Figure 61 User going in setting page

A screenshot of the 'Account Settings' page. At the top left is the 'REACT&RISE' logo with a heart icon. To its left is a 'Back' button. On the right is a yellow circular badge with a 'P'. The main title is 'Account Settings'. On the left, there's a sidebar with 'My profile' sections for 'Settings' and 'Billing'. The main content area includes: 'Name&Image' (logged in as 'Prashanna'), 'Email' (plohani2003@gmail.com), 'Password', 'Background' (light background), 'Logout' (button), and 'Delete account' (button). A note says 'You can successfully log out of your account by clicking the button below.'

Figure 62 Account setting page

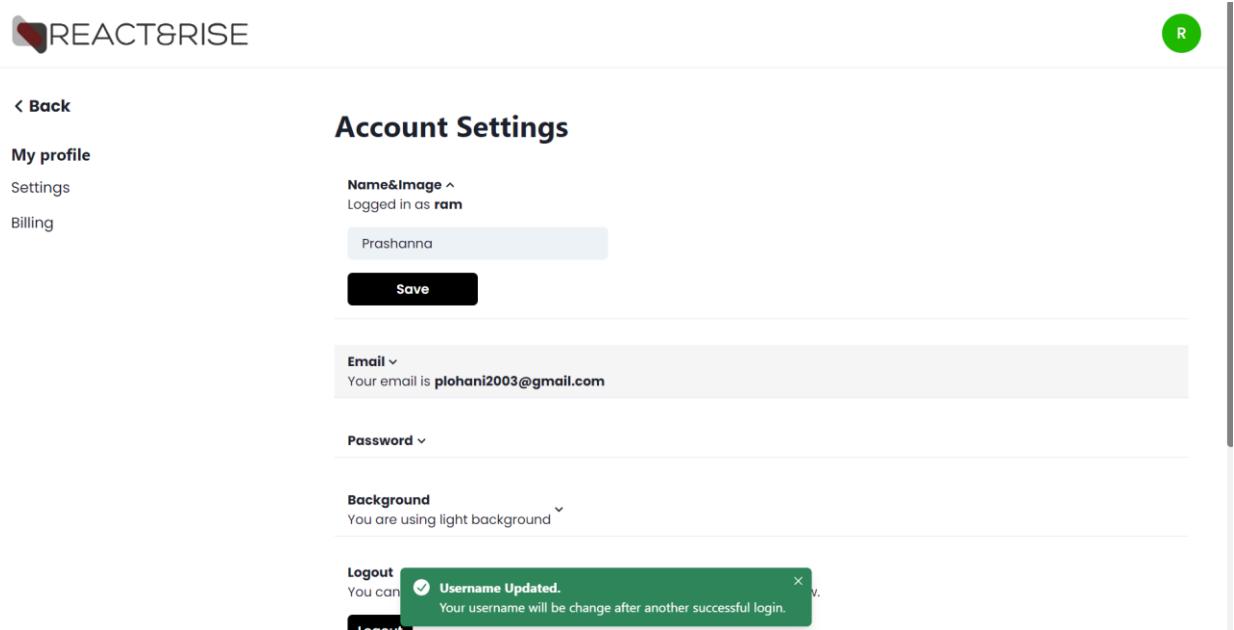


Figure 63 Changes the name

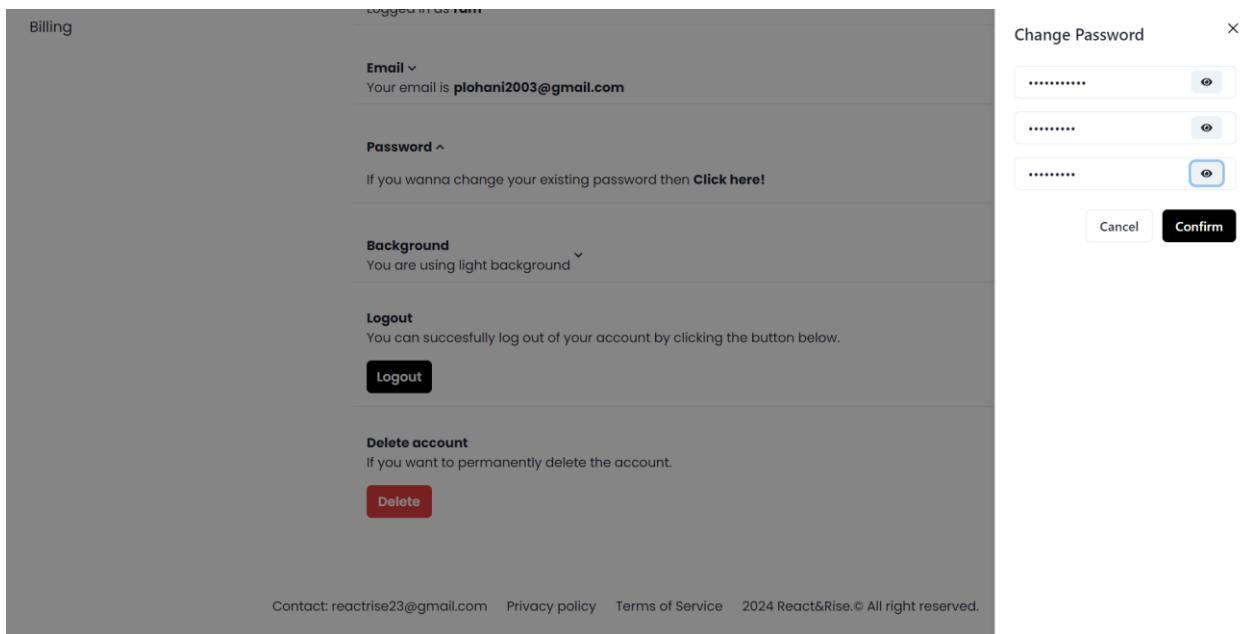


Figure 64 User changing password

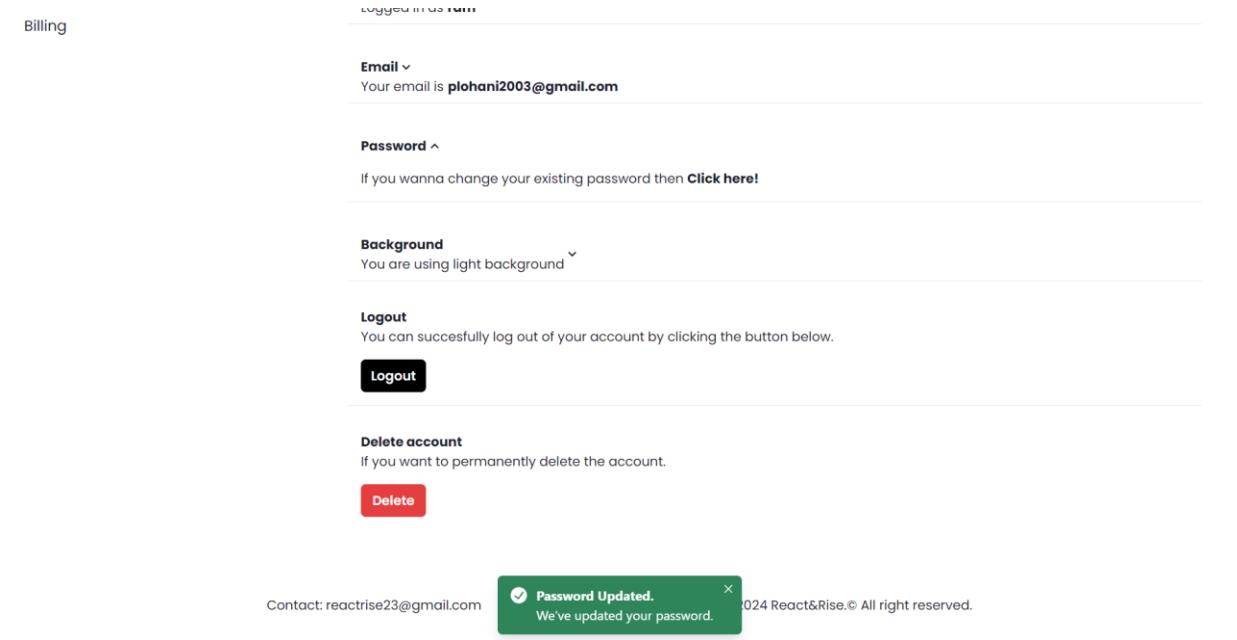


Figure 65 Password update message

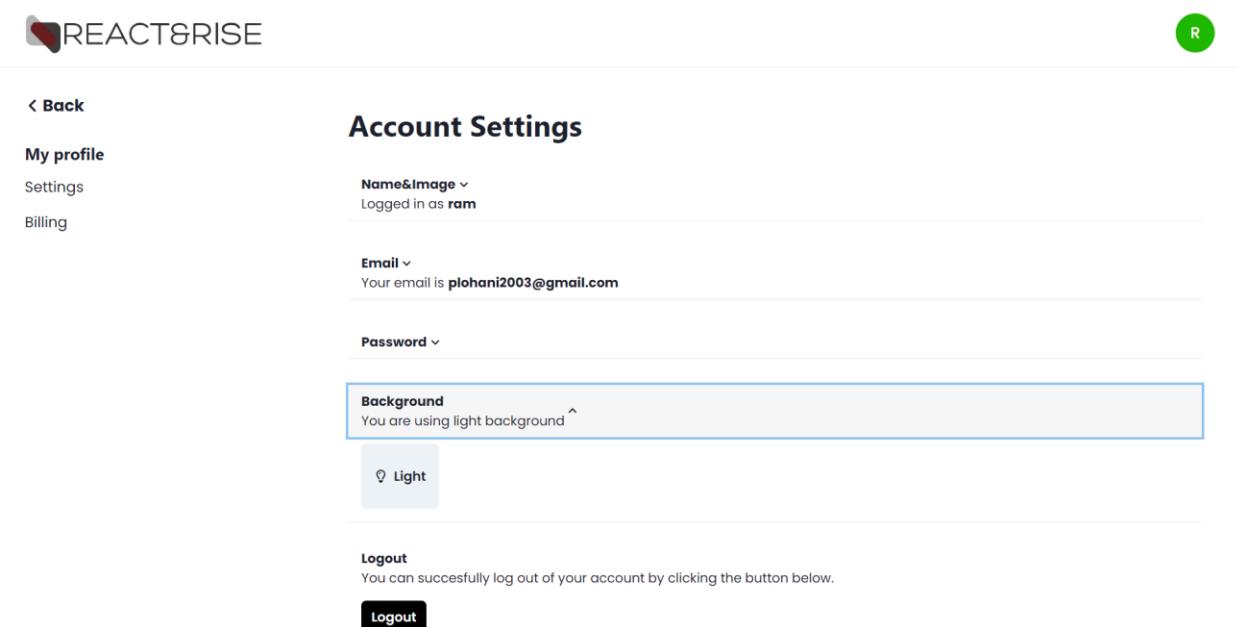


Figure 66 Light mode

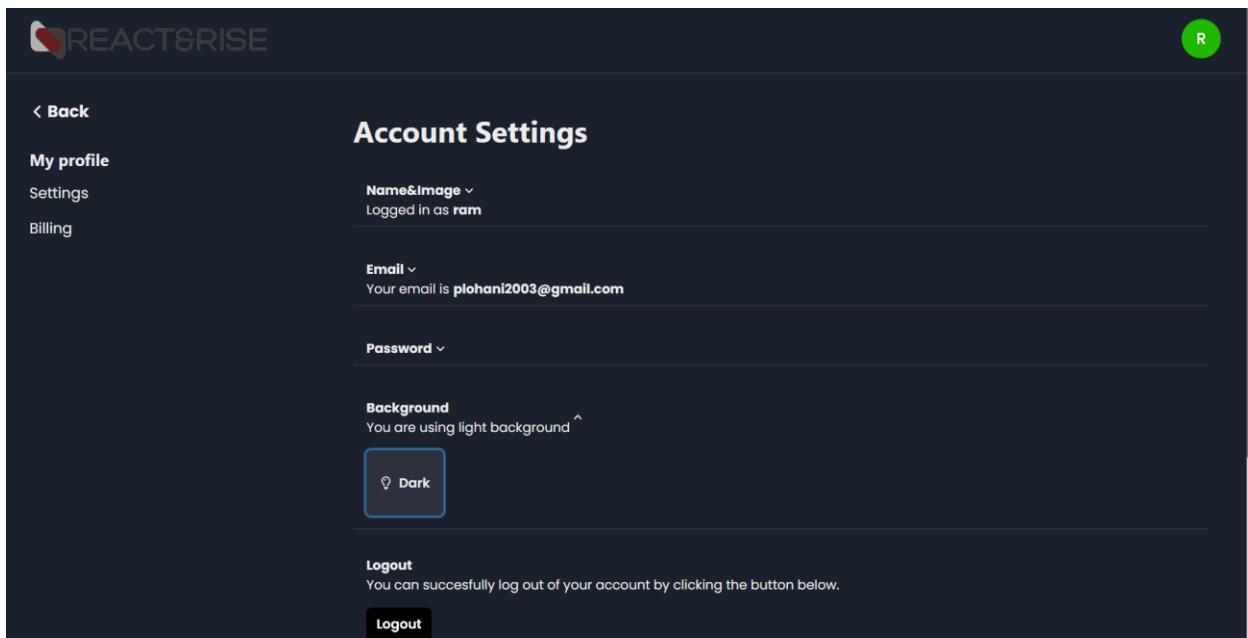


Figure 67 Dark mode

10. Conclusion

Following the system development of React&Rise, the project's initial aims and objectives were completely addressed, with a focus on the academic issues stated at the start. The major goal was to provide a safe platform that promotes open discourse in educational and professional settings. The objectives included increasing user engagement, improving learning outcomes, and encouraging greater team communication.

The system achieved its goals by offering a user-friendly interface that allows for anonymous conversations, therefore promoting involvement from people who might otherwise be hesitant to participate. The incorporation of technologies such as Mentimeter, which allowed for interactive and dynamic communication, helped to meet the goals of increasing engagement and improving learning outcomes. Academic problems about the ethical implications and usefulness of anonymous platforms were investigated, finding considerable advantages and disadvantages.

React&Rise's development and implementation have resulted in numerous significant discoveries. The platform has successfully increased user involvement and engagement in both educational and business contexts. The use of anonymous communication has been very effective in encouraging honest and open talks, particularly about difficult themes. However, the possibility of misuse, such as trolling or harassment, was noted,

emphasizing the necessity for strict control and clear instructions to provide a pleasant user experience.

Finally, React&Rise highlights the power of anonymous communication platforms to increase participation and promote open debate. The experiment demonstrates that, while these platforms can help to create more dynamic and inclusive interactions, they must be properly maintained to prevent misuse. Future initiatives should focus on improving moderating capabilities and investigating new features to better suit users' unique demands in a variety of scenarios.

11. Critical Evaluation of the Project

Developing the project React&Rise have been challenging and exciting. In the process of development, I got to learn a lot of new things about regarding real time analytics, Real time messaging, Authentication, Security, and hosting in a server.

The strength of this dissertation is the presence of detailed diagrams of the system like Functional Decomposition Diagram (FDD), Use case diagram, activity diagram, ER diagram & class diagram. These diagrams help to understand the system architecture and its working process along with its relationship with different other features. The report also highlights the main system features: Real time chatting and Real time voting which is the most important part of the project.

11.1. Finding and Process

While developing the project some major findings and observations were made:

- Real-time chatting system is more important to share the thoughts of the individual in an ongoing session. It helps to find and tackle the problem instantly and solve the problem as well. By real time chatting the engagement in the session is also enhanced

increasing the attention and the engagement in the session without hesitation.

- Taking the login with gmail will be causing several privacy concerns as React&Rise strongly disguise for taking the privacy of the user. In this the Gmail account is taken but the custom password is set because even if the database of the React&Rise is hacked then the Gmail account information is safe due to the custom password.

11.2. Development Process

- All the requirements of the system are collected. All the users need aims and objectives are collected.
- The architecture of the system is made using the collected requirements.
- At first the backend of the system is designed. The entire application runs on the internal API so that anyone can use it and integrate it in their application. They just need to pass the correct parameters on it.
- The UI of the project is made using Reactjs. The internal APIs are integrated one by one by calling the API from the frontend. After the successful integration the application is functional.
- User are authenticated using JWT token which is secure and efficient at the same time.

11.3. Planning and Management

- The project is developed using Kanban methodology since it is flexible, faster & adaptable. It is the perfect fit for my project.
- Jira is used to track the progress of the project to ensure that the project is completed successfully before the deadline.
- The project was precisely carried out using gant chart.

11.4. Quality of sources

- All the research papers & cited resources are collected from the reputable sources and all of them are latest paper (within 5-6 years).
- Reliable and efficient open-source library is used to have a robust experience.
- SMTP is used to send email regarding the contact us form and for resetting password.

11.5. Self-Reflection

The project was challenging and hard to make the chatting system to show the message in real time. This project is very valuable for me because it increased my learning experience in multiple programming language like Python (Django Rest Framework), Reactjs significantly which encouraged me to do personal as well as professional development. By implementing a real-time chatting system, it helped me to learn about the WebSocket and Django channel which were completely new for me.

From the technical view implementing all of these requires in-depth knowledge and skills in different areas like database management, query optimization, API development, access control mechanisms, authentication, and authorization.

For the success of the project, I constantly took feedback and guidance from the supervisor to foster the project. The project has contributed significantly to my professional growth and personal development. The knowledge, experience, and skill that I have developed while doing this project have enhanced my capabilities that will improve my future academic career.

12. Evidence of Project Management

12.1. Log Sheet

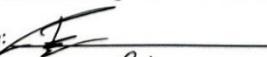
①

Faculty of Science and Engineering
School of Mathematics and Computer Science

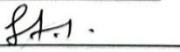
UNIVERSITY OF WOLVERHAMPTON

PROJECT MANAGEMENT LOG	
First Name: Prashanna	Surname: Lohani
Student Number: 2227425	Supervisor: Mr. Susin Dangol
Project Title: React & Rise	Month: December
What have you done since the last meeting	
<p>I have made a wireframe design of the web application of the React & Rise and made a GitHub folder for version control.</p>	
What do you aim to complete before the next meeting	
<p>If my design is approved then my aim is to start doing my frontend part as using react. otherwise I will work on my design and make it more impressive.</p>	
Supervisor comments	
<p>Your designs are good to go.</p>	

We confirm that the information given in this form is true, complete and accurate.

Student Signature: 

Date: 2023/12/21

Supervisor Signature: 

Date: 2023/12/22

Figure 68 Log Sheet 1

PROJECT MANAGEMENT LOG	
First Name: Prashanna	Surname: Lohani
Student Number: 2227425	Supervisor: Mr. Susin Dangol
Project Title: React & Rise	Month: January
What have you done since the last meeting	
<p>I created a frontend UI Design of the Landing page, & login/Signup page.</p>	
What do you aim to complete before the next meeting	
<p>- Database Schema - Fully functional Login & sign up page. - Home page UI</p>	
Supervisor comments	

We confirm that the information given in this form is true, complete and accurate.

Student Signature: 

Date: 28 Jan 2024

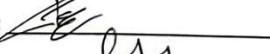
Supervisor Signature: 

Date: 28 Jan 2024

Figure 69 Log Sheet 2

PROJECT MANAGEMENT LOG	
First Name: Prashanna	Surname: Lohani
Student Number: 2227425	Supervisor: Mr. Susin Dangol
Project Title: React & Rise	Month: February
What have you done since the last meeting	
<p>- Made Database. - Signup Authentication - Home page created.</p>	
What do you aim to complete before the next meeting	
<p>- Login / sign up fully functional. - DB Schema. - Create room page & User profile page.</p>	
Supervisor comments	

We confirm that the information given in this form is true, complete and accurate.

Student Signature: 

Date: 4th feb 2024

Supervisor Signature: 

Date: 4th feb 2024

Figure 70 Log Sheet 3

PROJECT MANAGEMENT LOG			
First Name: <i>Rashmina</i>	Surname: <i>Lohani</i>		
Student Number: <i>2227425</i>	Supervisor: <i>Sushil Dangal</i>		
Project Title: <i>Realtime</i>	Month: <i>March</i>		
What have you done since the last meeting			
<ul style="list-style-type: none"> - Made UI - Responsive nav. - Forgot password. - Added Page dynamic. 			
What do you aim to complete before the next meeting			
<ul style="list-style-type: none"> - Frontend - Code + Room Generation. - Room UI. - Join room. 			
Supervisor comments			

We confirm that the information given in this form is true, complete and accurate.

Student Signature: *[Signature]*

Date: 10th March 2024

Supervisor Signature: *[Signature]*

Date: 10th March 2024

Figure 71 Log Sheet 4

Faculty of Science and Engineering
School of Mathematics and Computer Science



(5)

PROJECT MANAGEMENT LOG	
First Name: Prashanna	Surname: Lohani
Student Number: 2227425	Supervisor: Mr. Susin Dangol
Project Title: React & Rise	Month: March.
What have you done since the last meeting	
<p>Made a user selling page. UseContent used to change the user information. Room 01 Code generation.</p>	
What do you aim to complete before the next meeting	
<p>Simple multiplication Bug handling URL Handling.</p>	
Supervisor comments	

We confirm that the information given in this form is true, complete and accurate.

Student Signature:

Date: 17th March 2024.

Supervisor Signature:

Date: 17th March 2024.

Figure 72 Log Sheet 5

PROJECT MANAGEMENT LOG	
First Name: Prashanna	Surname: Lohani
Student Number: 2227425	Supervisor: Mr. Susin Dangol
Project Title: React & Rise	Month: March
What have you done since the last meeting	
<p>Hand Handled bug UI changed Small toast and dropdowns introduced.</p>	
What do you aim to complete before the next meeting	
<p>Login of the user. User Information updates. Change password.</p>	
Supervisor comments	

We confirm that the information given in this form is true, complete and accurate.

Student Signature:

Supervisor Signature:

Date: 24th March 2024

Date: 24th March 2024

Figure 73 Log Sheet 6

PROJECT MANAGEMENT LOG	
First Name: Prashanna	Surname: Lohani
Student Number: 2227425	Supervisor: Mr. Susin Dangol
Project Title: React & Rise	Month: March.
What have you done since the last meeting	
<p>Logout of the user handled. Setting page updated & Billing page introduced. Change password is functional & delete user will be functional.</p>	
What do you aim to complete before the next meeting	
<p>Major update in Backend. Review model will start. Database created. Creation Delete action created. creation.</p>	
Supervisor comments	

We confirm that the information given in this form is true, complete and accurate.

Student Signature: 

Date: 31st March 2024.

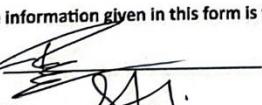
Supervisor Signature: 

Date: 31st March 2024.

Figure 74 Log Sheet 7

PROJECT MANAGEMENT LOG	
First Name: Prashanna	Surname: Lohani
Student Number: 2227425	Supervisor: Mr. Susin Dangol
Project Title: React & Rise	Month: April
What have you done since the last meeting	
<p>Backend of the room is setup Managed some bugs URL handling</p>	
What do you aim to complete before the next meeting	
<p>Room page creation. Backend of Room page update. Updating some frontend.</p>	
Supervisor comments	

We confirm that the information given in this form is true, complete and accurate.

Student Signature: 

Date: 7th April 2024

Supervisor Signature: 

Date: 7th April 2024

Figure 75 Log Sheet 8

PROJECT MANAGEMENT LOG	
First Name: Prashanna	Surname: Lohani
Student Number: 2227425	Supervisor: Mr. Susin Dangol
Project Title: React & Rise	Month: April
What have you done since the last meeting	
<p>Room page created frontend updated. Backend of the Room is functioning.</p>	
What do you aim to complete before the next meeting	
<p>Small error handling Session creation. Testing different use. Contact us form functioning.</p>	
Supervisor comments	

We confirm that the information given in this form is true, complete and accurate.

Student Signature: 

Date: 14th April 2024

Supervisor Signature: 

Date: 14th April 2024

Figure 76 Log Sheet 9

PROJECT MANAGEMENT LOG	
First Name: Prashanna	Surname: Lohani
Student Number: 2227425	Supervisor: Mr. Susin Dangol
Project Title: React & Rise	Month: April
What have you done since the last meeting	
<p>Contact us page updated.</p> <p>Message displayed to the presenter & participants.</p> <p>Random user creation of the participants</p> <p>frontend display</p>	
What do you aim to complete before the next meeting	
<p>Functional dashboard.</p> <p>Functional participants & comments data.</p> <p>Private URL Handling</p>	
Supervisor comments	

We confirm that the information given in this form is true, complete and accurate.

Student Signature: 

Date: 21st April 2024

Supervisor Signature: 

Date: 23rd April 2024

Figure 77 Log Sheet 10

PROJECT MANAGEMENT LOG	
First Name: Prashanna	Surname: Lohani
Student Number: 2227425	Supervisor: Mr. Susin Dangol
Project Title: React & Rise	Month: April
What have you done since the last meeting	
<p>Dashboard functional. functional participant & comment data. Private URL Handling</p>	
What do you aim to complete before the next meeting	
<p>I will make Light mode / Dark mode. I will handle url error I will make polling UI. I will handle minor error.</p>	
Supervisor comments	

We confirm that the information given in this form is true, complete and accurate.

Student Signature: 

Date: 2024/04/28

Supervisor Signature: 

Date: 2024/04/28

Figure 78 Log sheet 11

PROJECT MANAGEMENT LOG	
First Name: Prashanna	Surname: Lohani
Student Number: 2227425	Supervisor: Mr. Susin Dangol
Project Title: React & Rise	Month: May
What have you done since the last meeting	
<p>Dark mode complete.</p> <p>URL Error handled.</p> <p>Update count handled.</p>	
What do you aim to complete before the next meeting	
<p>Pulling system backend.</p> <p>Pulling system functional.</p> <p>Rate Use of Django Channel</p>	
Supervisor comments	

We confirm that the information given in this form is true, complete and accurate.

Student Signature: 

Date: 2024/05/15

Supervisor Signature: 

Date: 2024/05/15

Figure 79 Log Sheet 12

13. Appendix

13.1. Survey Form

33 responses

Link to Sheets

Not accepting responses

Message for respondents

This form is no longer accepting responses

Summary Question Individual

Figure 80 Survey form 1

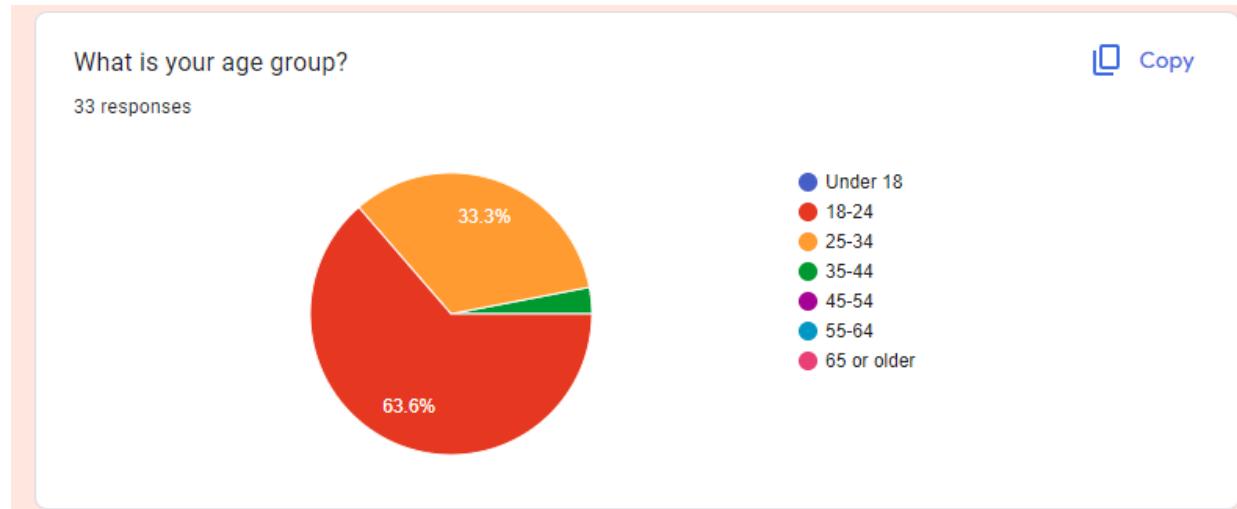


Figure 81 Survey form 2

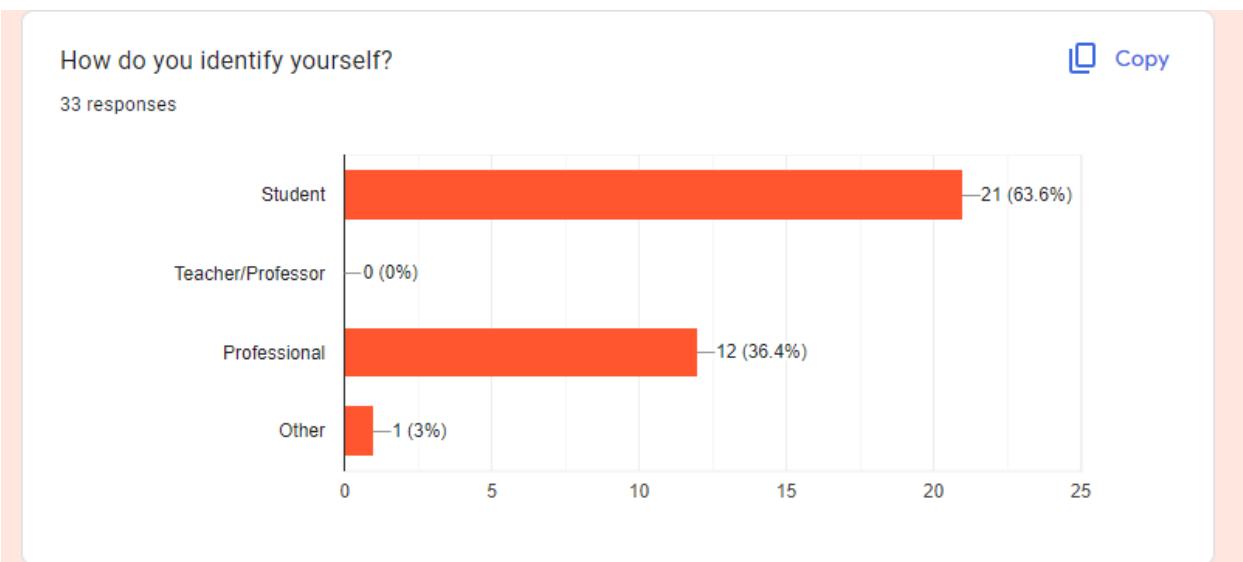


Figure 82 Survey form 3

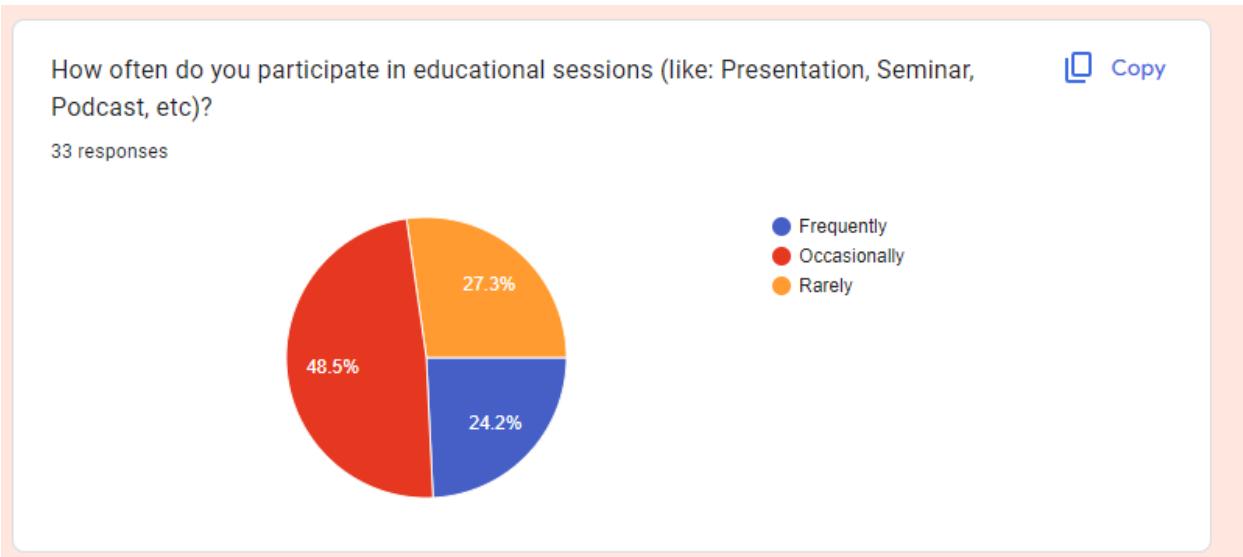


Figure 83 Survey form 4

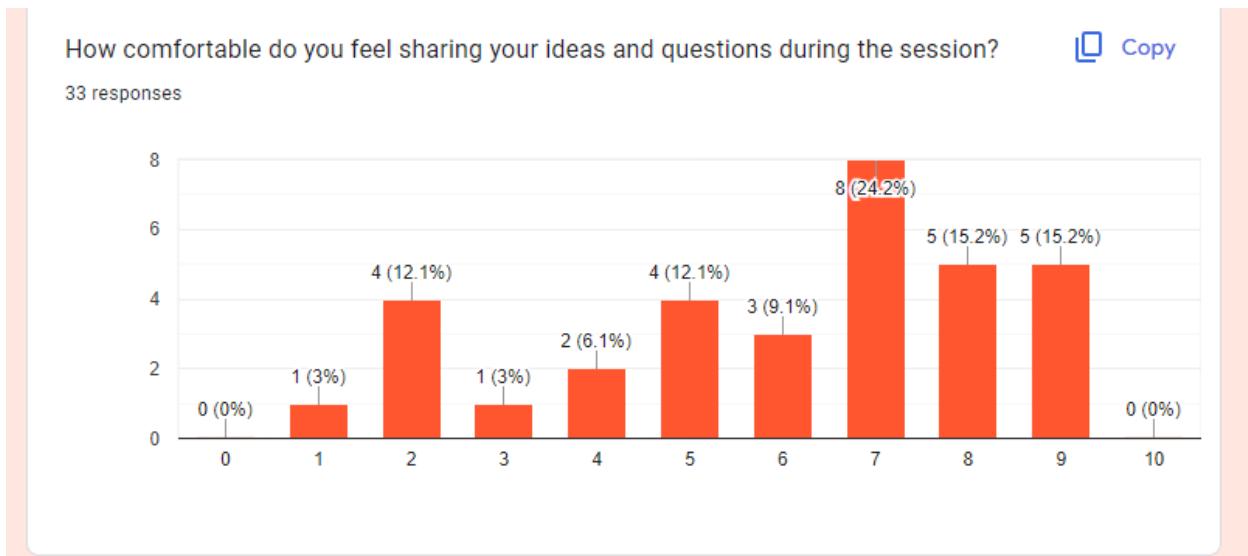


Figure 84 Survey form 5

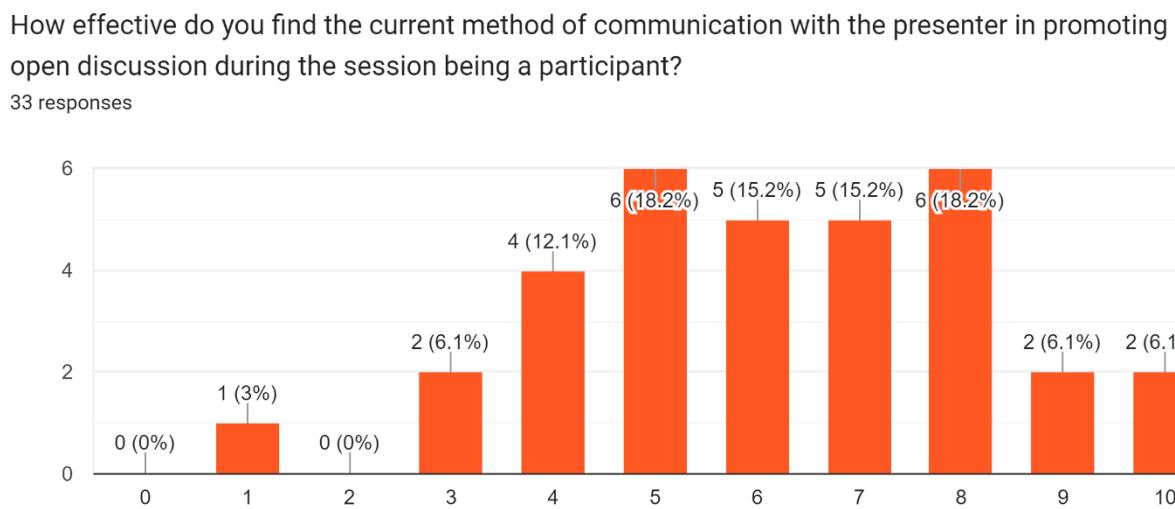


Figure 85 Survey form 6

What problems have you encountered during the session?

33 responses

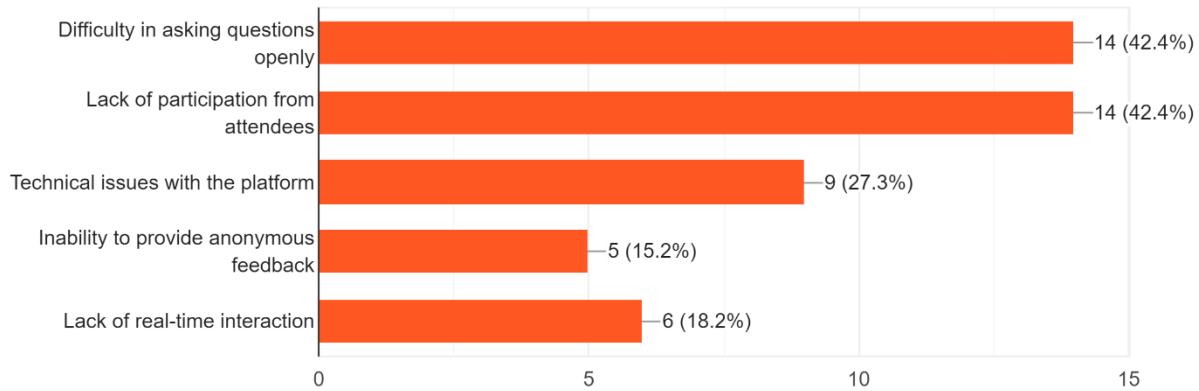


Figure 86 Survey form 7

Did the fear of being judged affect your willingness to contribute to the session?

33 responses

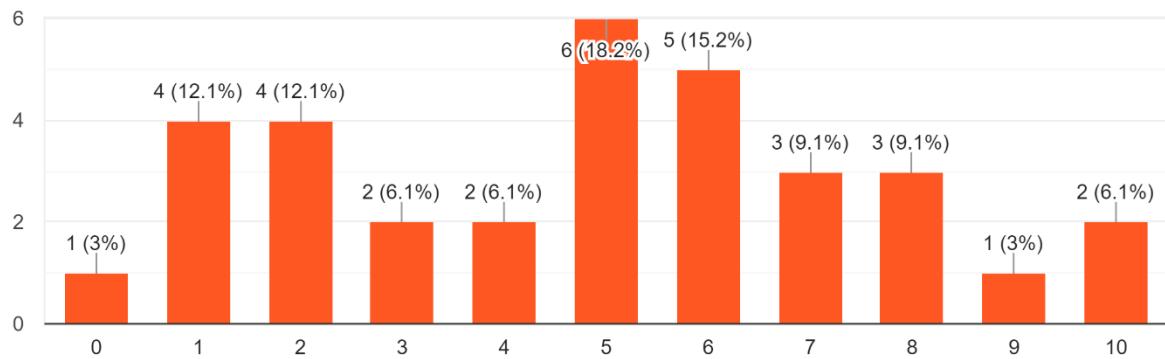


Figure 87 Survey form 8

Have you experienced any issues with privacy and security during the session?
33 responses

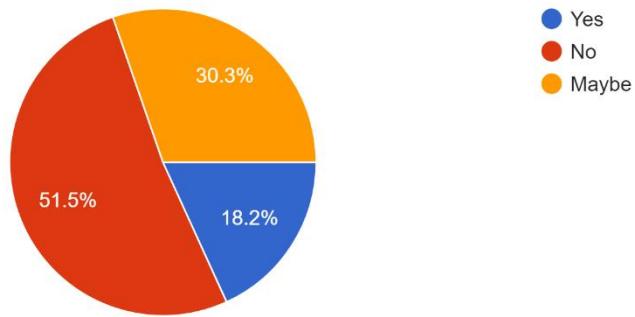


Figure 88 Survey form 9

Would the ability to participate anonymously encourage you to contribute more actively?
33 responses

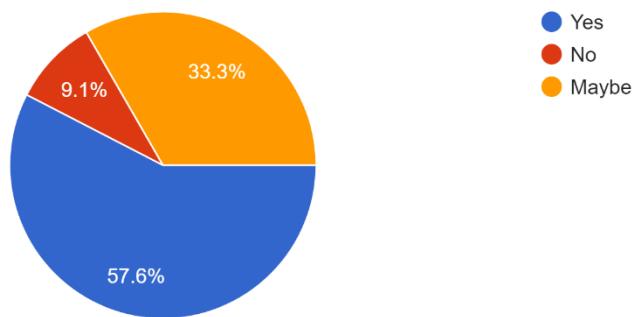


Figure 89 Survey form 10

Do you think real-time feedback tools would enhance the session's effectiveness?

33 responses

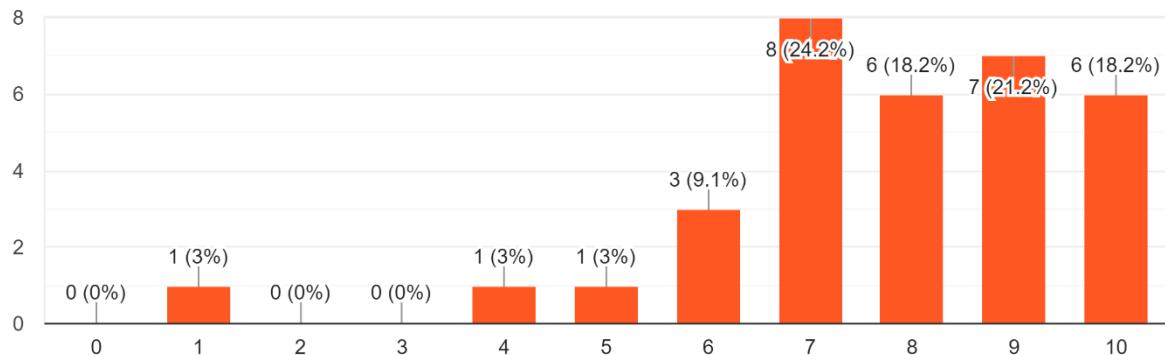


Figure 90 Survey form 11

How important is it for you to have a feature that allows anonymous messaging during sessions?

33 responses

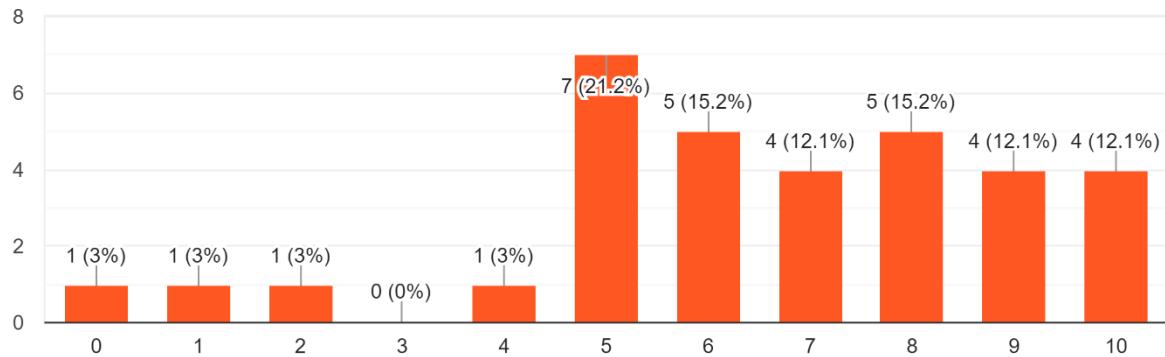


Figure 91 Survey form 12

Which features do you believe would help improve your session experience? (Select all that apply)
31 responses

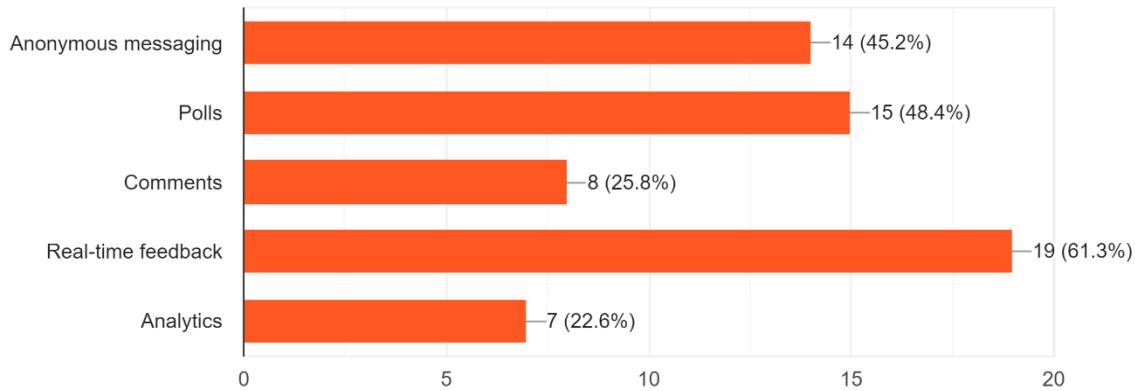


Figure 92 Survey form 13

How likely are you to use a platform that offers these features to handle the problems identified above?
33 responses

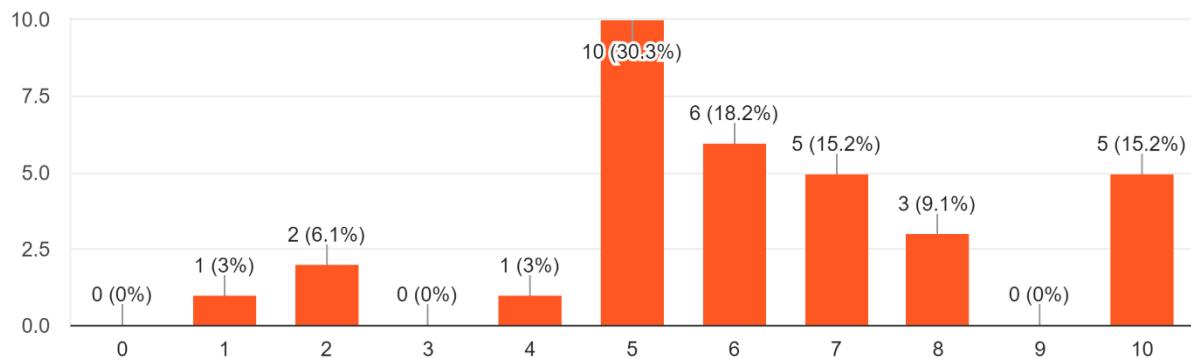


Figure 93 Survey form 14

What do you think could improve the interaction and engagement in future sessions?

18 responses

Nothing much have no idea

...

By interacting student

I believe the interaction feature like anonymous feature will really helps me express my thoughts without the fear of being judged.

Realtime feedback

Real time feedback

something

Collaboration

Session Activities and Discussion

Figure 94 Survey form 15

What challenges or issues did you encounter that were not addressed during the session that you attended?

16 responses

-

Access to Resources

N/a

Time constraint that allows speaker to address limited queries.

1. Sometimes, we don't get the exact or relatable answer of the questions we ask to the trainer or speaker.

2. Lack of genuine audience

Unable to express own ideas, fear of being judge and mistaken

Nothing much

Judgement

Figure 95 Survey form 16

Would you recommend a platform with enhanced features (e.g., anonymous participation, real-time feedback) for future sessions?

33 responses

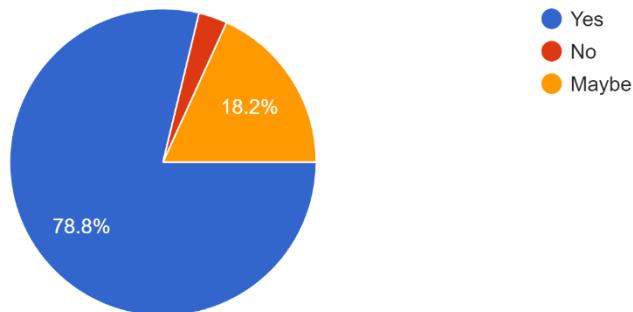


Figure 96 Survey form 17

14. References

- Chen, 2020. Leveraging Interactive Presentation Tools for Effective Communication in Virtual Teams. *Journal of Organizational Communication*, pp. 25-28.
- Corporate Learning Institute, 2021. A Case Study. *Enhancing Corporate Training through Interactive Presentation Tools*, pp. 15-17.
- Emma Mayhew, M. D. A. M., 2020. Active Learning. *The impact of audience response platform Mentimeter on the student*, pp. 20-25.
- Ismahel Adewumi Raji, I. B. B. S. U., 2022. Interactive Tools for Effective Employee Training. *A Comparative Analysis*. *Journal of Corporate Learning*, pp. 45-60.
- Ma Mohin*, L. K. S. P., 2020. Using Mentimeter to enhance learning and teaching in a large class. *Mentimeter*, pp. 4-7.
- Norziha Megat, N. F. M. A. R. Y., 2020. Enhancing Classroom Engagement Through Padlet as a Learning Tool: A Case Study. *New Learning Environment*, pp. 15-20.