

**Final Project Report**  
**Grimpeurs Cycling Club App**

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SEG 2105: Introduction to Software Engineering

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## Introduction:

This report showcases our group's version of the SEG 2105 final project, the Grimpeurs Cycling Club (GCC) App, which acts as a central hub for various cycling activities. Our app allows for three user types: administrators, cycling club owners, and participants, each with specific functionalities. Administrators handle events, accounts, and content moderation, while cycling club owners oversee event creation, route planning, registration, and results. Participants are involved in account creation, event discovery, registration, and optional route tracking.

Below, we have added the final UML diagram, contributions table, app screenshots, and lessons learned throughout this project.

## UML:

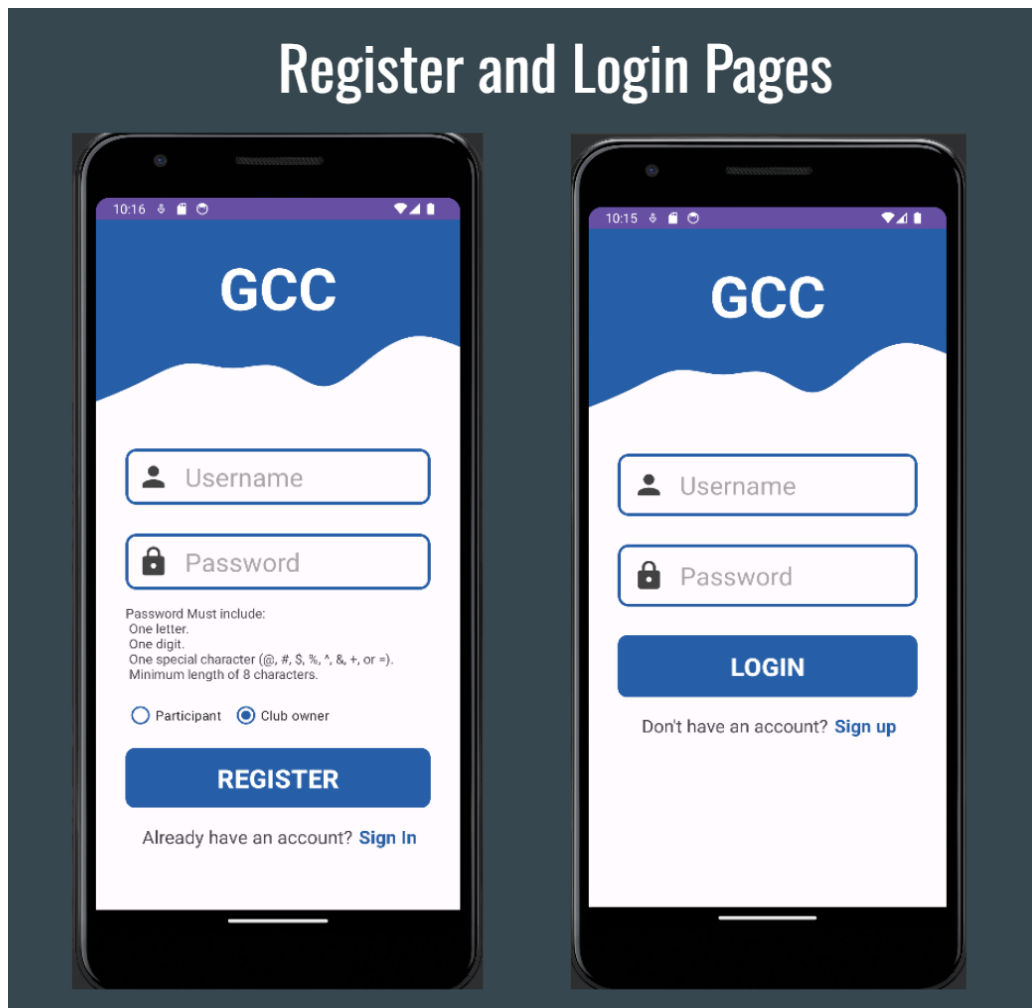


**Contribution Table:**

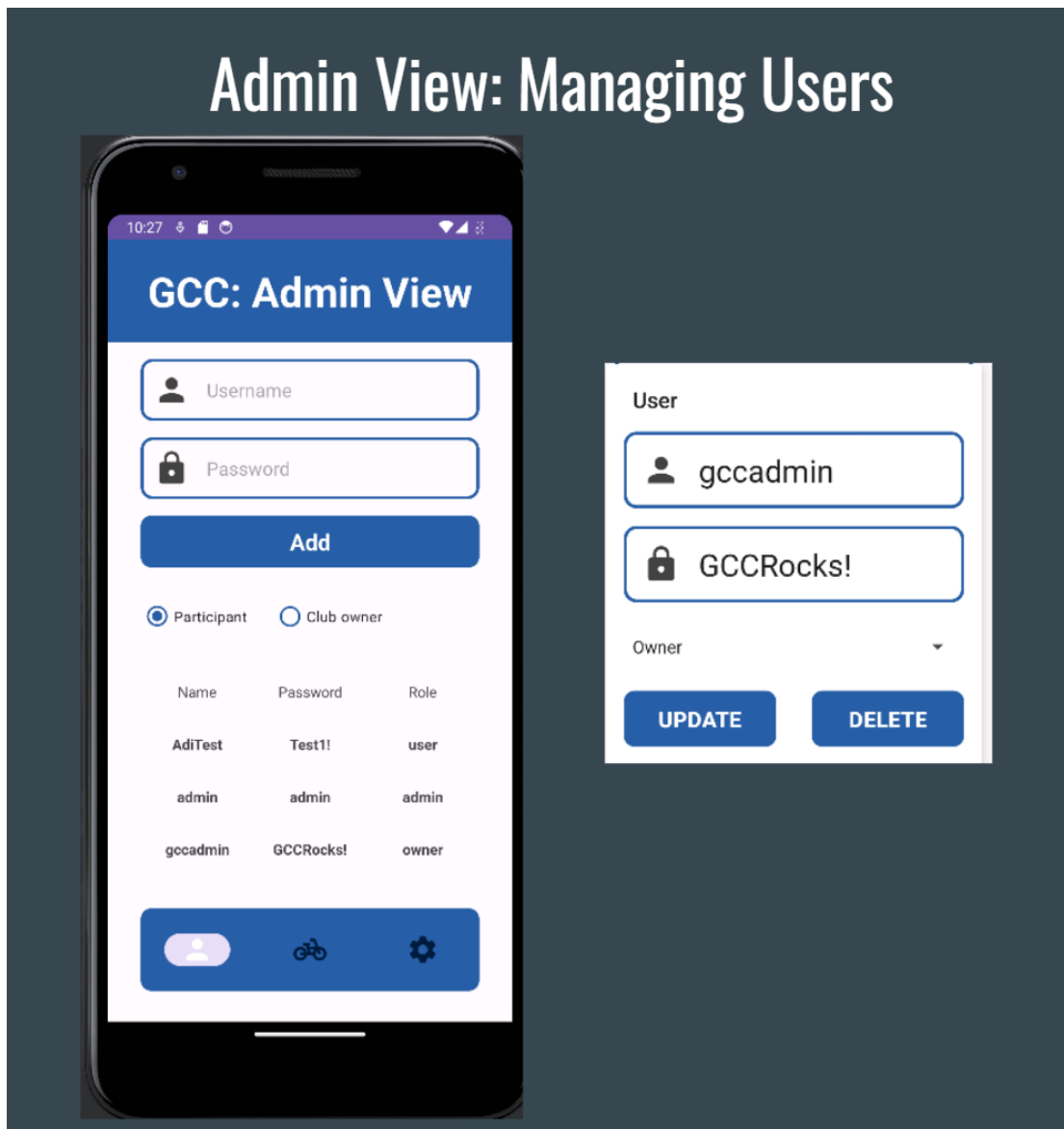
Name	Contribution
Sahil Shukla	Back-End Team worked with Raman <ul style="list-style-type: none"><li>● Set up firebase database</li><li>● Worked on java files for all deliverables ensuring all functionality worked</li></ul>
Raman Gupta	Back-End Team worked with Sahil <ul style="list-style-type: none"><li>● Worked on java files for all deliverables ensuring all functionality worked</li><li>● Project management</li><li>● Version control and management of branches</li><li>● Beautified UI pages, ensuring user-friendly experience</li><li>● Added field validation to ensure no crashes in the app</li></ul>
Aditya Mehrotra	Front-End Team worked with Krisha and Mekhi <ul style="list-style-type: none"><li>● Implemented UI designs for pages such as Admin Event Types, Admin Users Page and more</li><li>● UML Diagrams</li></ul>
Mekhi Perry	Front-End Team worked with Aditya and Krisha <ul style="list-style-type: none"><li>● Implemented UI designs for pages such as Admin Settings, Login Page, Register Page and more</li><li>● UML Diagrams</li></ul>
Krisha Veera	Front-End Team worked with Aditya and Mekhi <ul style="list-style-type: none"><li>● Designed rough draft of pages on paper</li><li>● Implemented UI designs for Participant Search Page, Participant Home Page, Welcome Page and more</li></ul>

## Screenshots

The administrator has a pre-made account with the Username: admin and Password: admin. Other users, such as participants and club owners, can create their accounts on the Registration Page and log in through the Login Page.



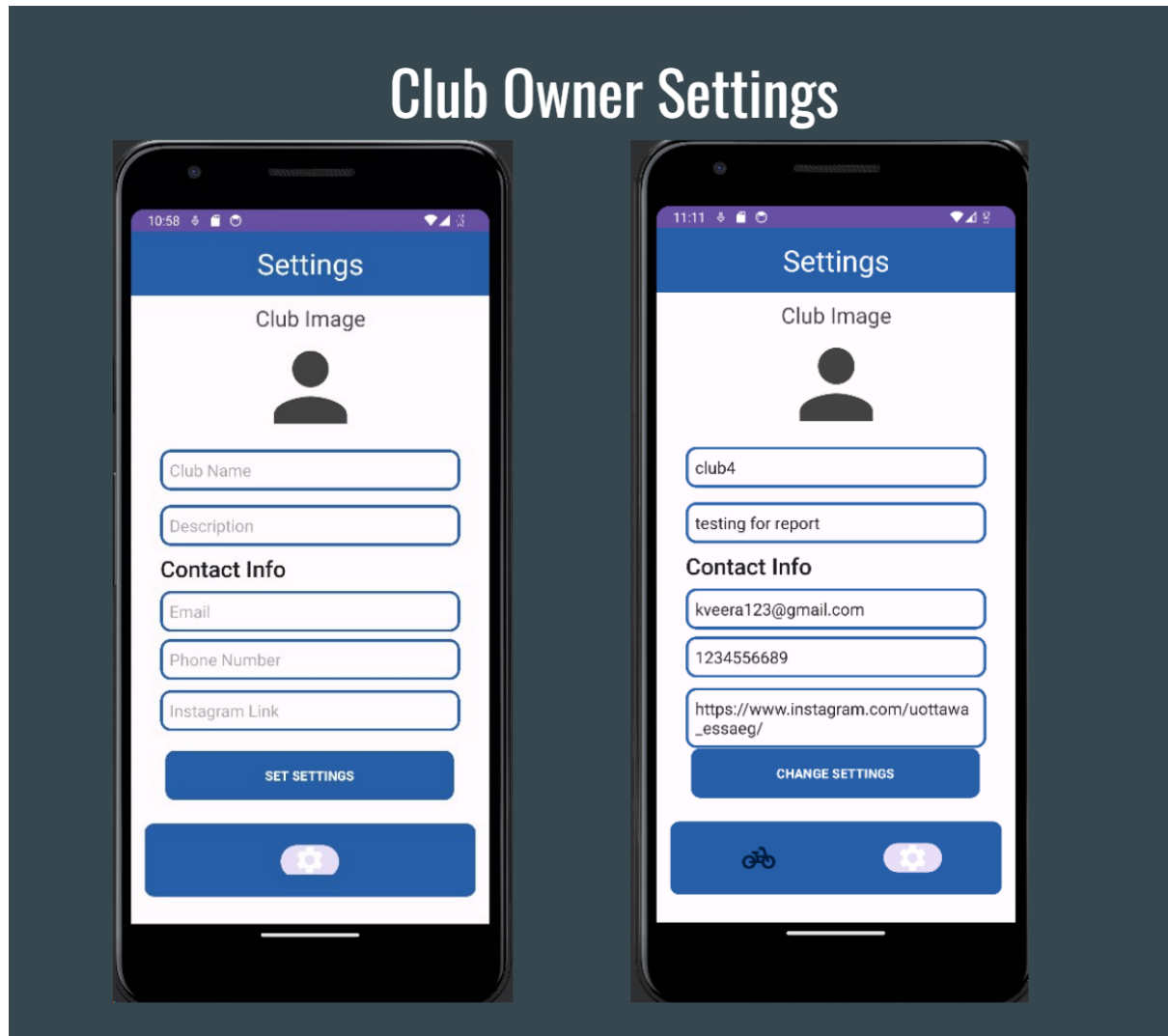
After the admin logs in, they will be directed to the Accounts Page. On this page, they have the capability to add users by generating their usernames and passwords, as well as assigning them the role of either a club owner or participant. Additionally, the admin can delete or update a user by long-pressing on the list of users.



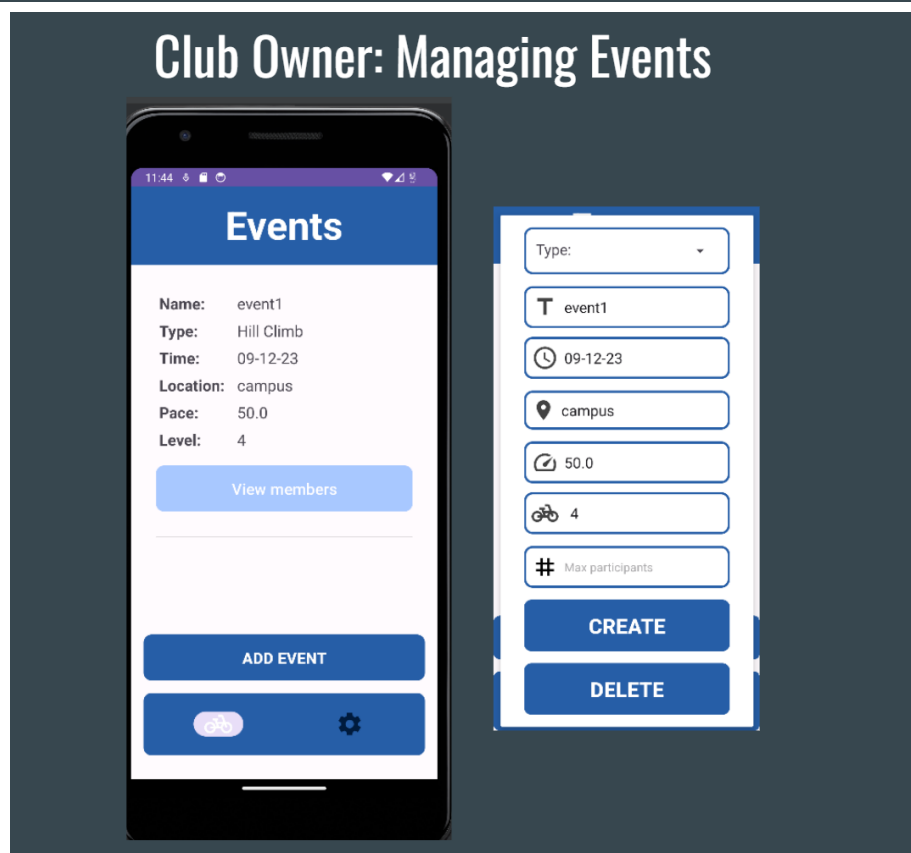
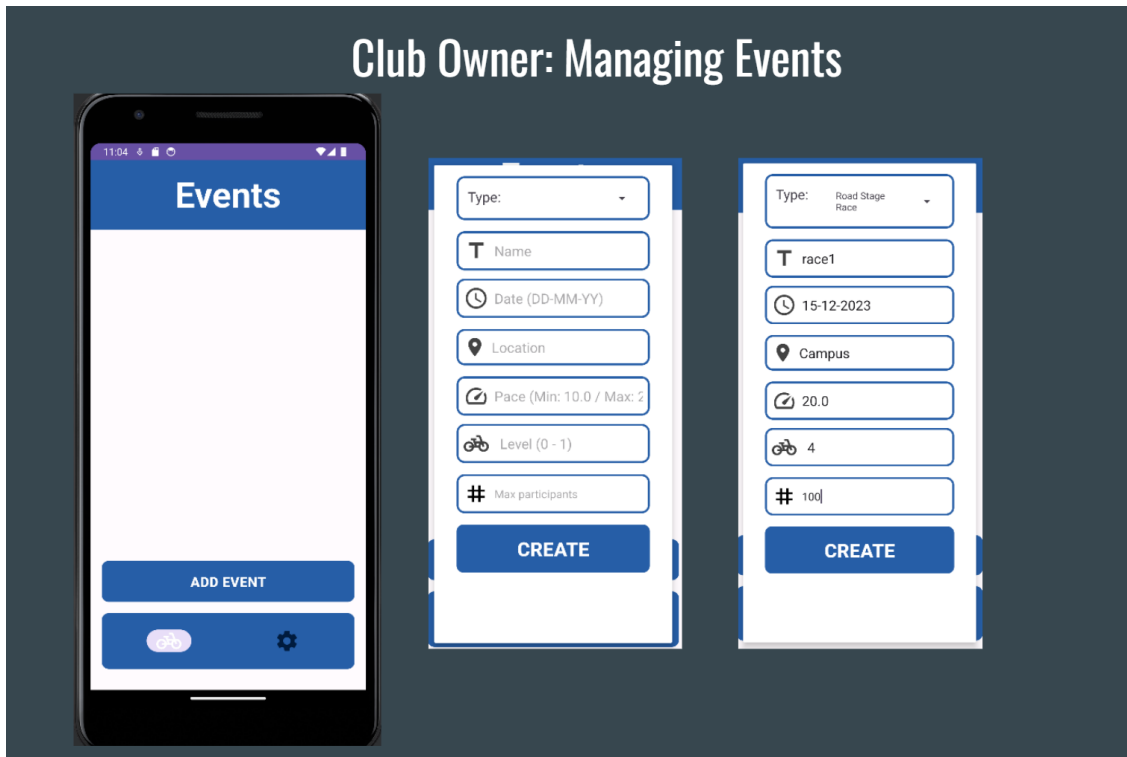
Following that, the admin can visit the Event Types Page. On this page, they have the option to create different Event Types by entering parameters such as name, description, pace, age, and level. The admin also possesses the ability to delete or update Event Types that were previously created.



After logging in for the first time, the Club Owner is limited to the Settings Page. The club owner is required to provide their name, description, email, phone number, and an Instagram link. They retain the ability to edit this information at a later time.

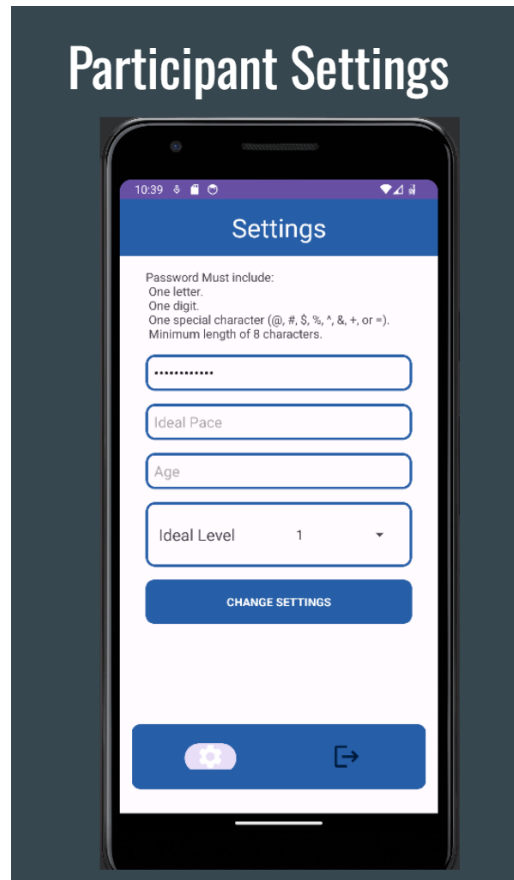


In the Events Page, the club owners can add events by entering parameters such as name, date, location, pace, level, and maximum participant count. However, club owners are constrained to the types of events made available by the admin. Club owners can also delete and edit the events they have added. They are also able to view the Participants that have joined their events.

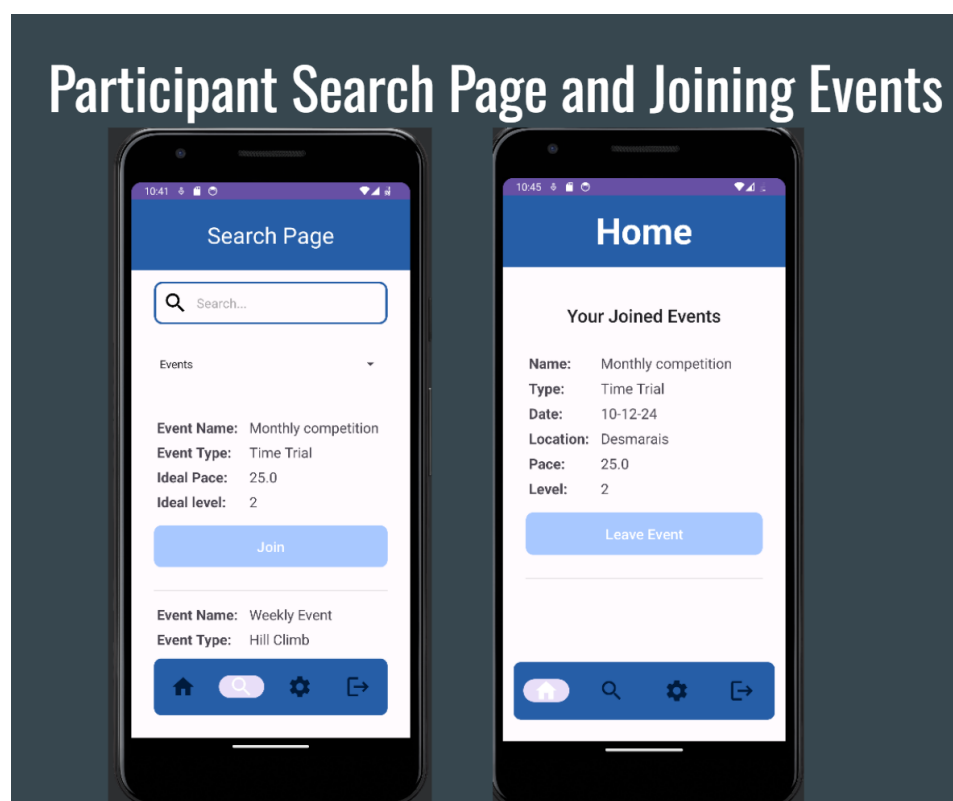
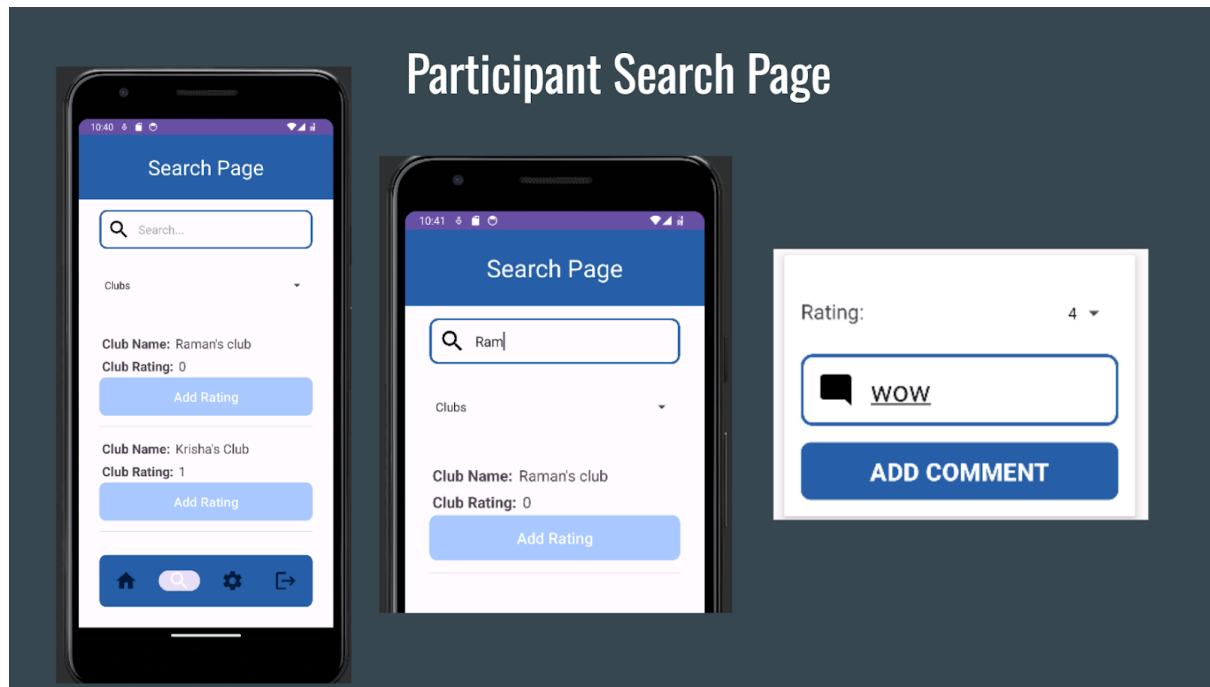




Moving on to Participants, upon creating an account, they are directed to the Settings Page. Here, they can input essential information like their ideal pace, age, and level. These parameters play a role when Participants attempt to join events. These fields can be edited later by the Participants.



On the Search Page, Participants have the ability to search for both clubs and events. They can refine their search by filtering based on club name, event type, or event name. Participants can contribute to clubs by adding a rating and leaving a comment. In the case of events, participants can join them provided they meet the specified age, pace, and level requirements for each event. The events joined can be viewed on the Home Page and participants also have the option to leave these events.



## **Lessons Learned**

The key takeaways revolved around collaboration and code sharing within a single codebase. Before this project, our familiarity with Git was quite limited, making it a challenge to translate our in-person discussions into tangible Android applications. Connecting the frontend and backend posed another hurdle. In hindsight, if we were to tackle this project anew, we'd revamp our project management approach. Incorporating a tool like Trello would streamline the process, and implementing branch-per-user strategy, along with safeguarding the main branch, would significantly reduce merge conflicts.

