

Demo Summary

Preface

Nothing in our demo is simulated except for the Event search items navigation to the event detail view. The event detail view doesn't exist yet so it goes to the club detail view. Everything else, including, but not limited to login, discussions, authentication, data storage, UI, server, etc that is currently in the application is actually implemented and NOT simulated. To avoid repetition we are specifying this at the start of this summary. Below is a summary of each topic highlighted in our demo in the presentation order.

Registration

The user, Keshav, found out about ClubWAT from a friend and is very interested in registering (future references to user refer to Keshav). They've downloaded the app and registered with their full name, Waterloo email, and a password. Validation occurs in the front end and the backend, including checking that the fields are populated, the email is a **@uwaterloo.ca** email, etc. If an error occurs it displays red text highlighting what went wrong. If all information is valid, the server sends an automated email from **clubwat43@gmail.com** to the specified email with a 6 digit code. The user enters the validation code and gains access to the application with their new account. They can resend the code, and if the code is incorrect the application will show an error in red text. Password hashes are stored with 2^{12} rounds of hashing and >32 bits of salting. A coded JWT token is passed back to begin the user session if registration is successful.

Login

The user can login with a valid email and password. If an invalid email or password is provided, an error will be shown. If the pair corresponds to a valid account in the backend it will respond with a coded JWT token to be saved in the app and store the user session.

Home Screen

The user is greeted with the home page which displays two sub options for clubs, and events. The clubs sub-tab shows the clubs the user has joined/requested to join. The events sub-tab shows the events for the clubs the user has joined, the events they've bookmarked as well as the events they've marked as attending. The club list items are clickable and go to the club details page.

Club Details

The club details page shows some important information for the chosen club, also allowing the user to join/leave/request to join the club. It also displays the club description.

Club Discussions

Users who have joined a club and their request (if applicable) has been approved, they have access to the club messaging platform. It acts like a normal messaging system like iMessage.

Club/Event Browsing

The user can choose the 'Search' tab to search for clubs or events. By default it shows the full list of clubs/events. The user can click the search bar and begin searching which will narrow down the list of clubs/events. Clicking a club item will go to the club detail page for that club.

Logout

The user can go to their profile tab and click logout which clears their user token and goes back to the login screen.

Status Report

Current Progress

These are the status of each Functional Property. Note that FPs not mentioned in this list haven't been started yet.

<https://github.com/users/Kggupta/projects/1>: The full breakdown of completed tasks can be seen here, under the "Done" column.

- **User Authentication:** Complete, see demo summary.
- **User Interface:** In progress, by definition our UI isn't complete since we have other functional properties to implement.
- **Club and Event Browsing:** Complete, see demo summary.
- **Interactive Club Discussions** In progress, almost completed, this feature is only missing deleting messages.

Difficulties

We are having difficulties with the notifications/alert functional property since all the push-notification options which would fit our needs require payment. Unfortunately, as university students we're not in a position to pay for this service so we are looking for free alternatives. We are currently exploring the use of email notifications instead of device push-notification. We believe email notifications will remove the roadblock as we already have a proof of concept in the form of the code verification email flow described earlier in the report.

Addressing TA/Buddy Team Feedback

1. **Harm that can occur to University of Waterloo Students:** We are taking several steps to address this possible harm. First, we are using the popular email code verification strategy used by well known companies to send a unique 6 digit code to a user by email and requiring they enter the code correctly, since only **@uwaterloo.ca** domain users can register, this effectively limits our application to verified people that are/have been part of the university body, this has already been implemented. Secondly, we are going to make it so that some events can be set as 'Private' by club organizers that are registering the event, private events will only be visible to students that have joined the club and paid the membership fee (if there is any), which requires club admin approval of the user to accept their join club request,

serving as a security layer to make sure only the right people access certain events, this has not been implemented yet.

2. **Harm to club fairs:** We will address this by checking if there are any active club fairs, which will be stored as a special type of event in the application, and if there is one, it will show a dialog page on startup of the application in the home screen for all registered users showing event details for that club fair and encouraging them to go. This will effectively give spotlights to club fairs and ensure they aren't ignored and don't see a drop in attendance.

Next Month Of Development

Over the next month we will focus on completing event bookmarking/scheduling, club registration (for students), club member management (for club admins), email notification alerts, sharing events with users, a user friendship system, club chat discussions, event creation/management for club admins, personalized club recommendations for users in the 'For You' page, as well as a feedback system for clubs and events. We will also implement a way for users to download all their user data and delete their account.

<https://github.com/users/Kggupta/projects/1>: The full planned/in progress task breakdown can be seen here.

Component Diagram

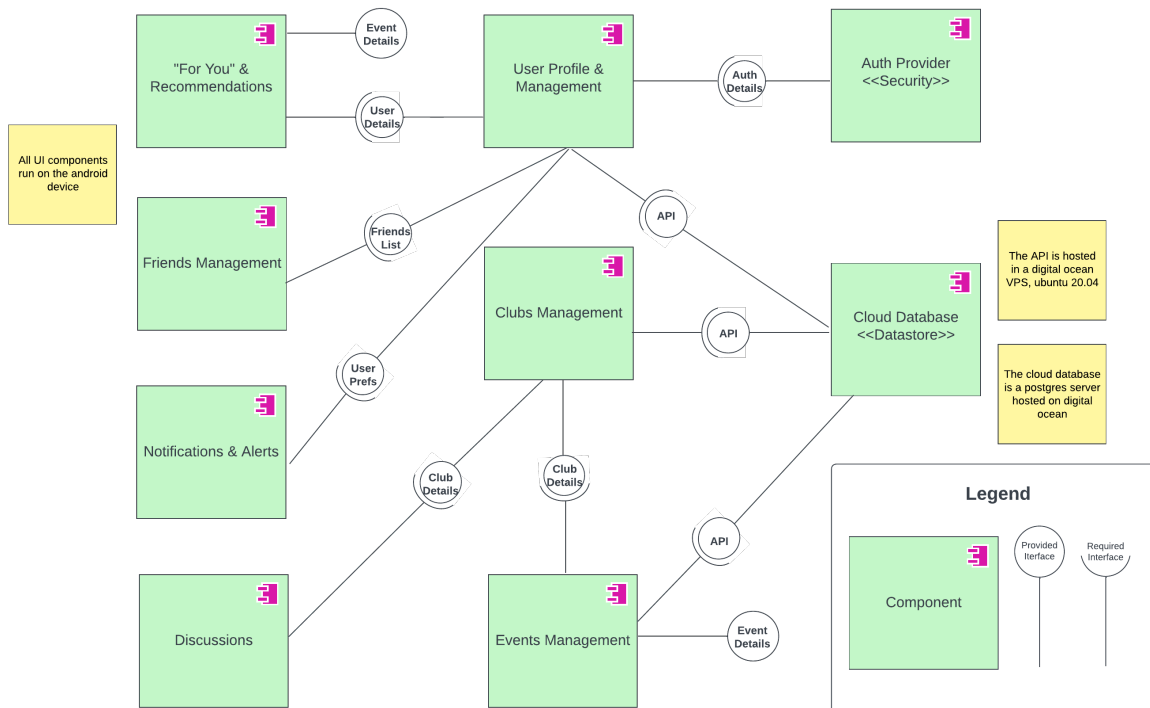


Figure 1: This diagram shows the dependencies and interfaces between all components.