# Workout With Me - A Fitness Application for the University of California, Santa Cruz

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## Abstract

Finding people to work out with can be difficult. Maybe youre trying to find people to play a pick up game of basketball, or meet up to do some yoga together. This can be something thats very hard to do especially if you dont know enough people that would want to join. With our app Workout With Me we are trying to alleviate the stress and inconvenience of having to go out and find people for the things you want to do. Our app is different from other social media because we are specifically focused on fitness activities. Having it fitness specific will make the experience better and easier for our users get out there and enjoy the activity they love while also making some friends in the process.

## 1. OBJECTIVE

"Workout With Me" is intended for UCSC students and faculty to meet new people within this community to participate in fitness-related activities. Whether the user has no experience in a particular activity or is proficient in another, this app intends to create camaraderie in a setting where everyone has similar interests and enjoys teaching and learning new skills. There are many event-hosting applications on the market, where users can create events for potential meet ups, however most of these applications tend to large communities with no boundaries besides a location cut-off. On account of this, users may be hesitant in engaging with the application due to the uncertainty of dependable, secure meetups. Additionally, users may not have reliable transportation, which can hinder their opportunities to participate in these events. With "Workout With Me", only users with a valid UCSC email are able to register. Due to this requirement, users know that they will be interacting with others within this safer community, and feel more confident in participating in a lesser intimidating setting. Furthermore, the location of these events will most likely be held on campus in places like OPERS, Rachel Carson College, and other similar facilities. In the perspective of an on-campus resident, this is ideal because the resident knows that they will be interacting with fellow UCSC students/faculty, and they will be able to take the bus or simply walk to the location without the worry of transportation.

In addition to what other similar applications are lacking is the participant limit and count. Other similar applications fail to address the participant limit in meet ups which can cause complications such as, lack of equipment, not enough space, and essentially unpreparedness. Regarding the participation count, it is important to know whether or not other users are genuinely interested in performing in these events. This will give the original poster an idea of how many users will be attending and plan equipment/itinerary accordingly. "Workout With Me" kept these aspects in mind and incorporated them into the current version of the application.

Overall, the intentions of this application are to bring the UCSC community together through the interest of fitness activities. Users will be able to meet new groups and develop their skills in a fun, productive way.

## 2. COMPONENTS

When the user first opens the application, they will be introduced with the splash page which will direct them to the first activity where they may sign in or register their profile. The user will then be able to register by pressing the register button and then entering in the basic required information such as their name, UCSC email, and password. They will then have to authenticate their profile by going to their email and confirming the authentication. After that, the user may sign in with their registered profile and that will then redirect them to the newsfeed activity, where all the current active events are displayed. Here, the user can view current events by clicking on a particular event. They may post comments and also click on the icon picture to view the hosts profile. Back on the newsfeed, there are two buttons on the action bar that allow the user to either edit their profile or add an event. If the user chooses to edit their profile, they can click on the edit profile button and it will redirect them to that activity. Here, they can upload a profile picture, add in their year, major, biography, and interests. If the user chooses to add a new event, then they can do so by pressing the add event button and then adding in the information for the event, such as the event title, location, time, date, description, and amount of users allowed. After they add the event, it will be added to the database which will then instantly reflect on the newsfeed.Images of these components can be seen in Figure 1 on page 3.

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## 3. DEVELOPMENT

Our groups first objective when starting the development of this project was to figure out how we were going to store user information and what database would be easiest to do that. We decided on using firebase which Android Studio already comes with some helpful prebuilt methods for. We were able to get our database setup for the user. This consisted of the users name, major, interests and a brief description about themselves. Once we set up this database in firebase we implemented that into our app. From there we worked on getting a register page and a sign in page working. To do this we used the create user method and sign in user method that firebase uses.

After we were able to sign in and create users and save their data from the profile edit page we started working on being able to create an event and post those events to a list view. To do this we created another space in our database that would hold these events. Once we got the basics for this working where we could create a simple event and and put it into the listview we started to add more features to it. We implemented features so users can join an event. After the user joined the event it would now show how many people were attending that event. From there we also added a feature that would allow the user to leave the even, so if something came up they could take themselves out of the event. And then we implemented a delete event feature so the creator of the event could delete it when they wanted to.

From this point we had the basics of the entire app working how we wanted. Now we were adding features that thought would add more depth do our project. The next thing that we implemented was being able to upload pictures. This was one of the most challenging parts of our app but once we figured out how to upload pictures and store them via firebase we were able to have users create a profile picture. From here we added the users profile picture into each event they created on the listview which held all the events, and this was a nice feature that made the app have more depth.

The last feature that our group implemented was a comments section. We new we wanted to have some sort of user to user interaction. We put a comments section and the bottom of each event so users can communicate and set up specifics or if they had questions they would like to ask about the event. Throughout the project UI was being implemented and improved. This consisted of improving the overall aesthetic of each page and adding some nice quality of life stuff such as implementing a clock the user could choose the time for their event and a very clean looking way that the user could pick the date there app was taking place.

## 4. CONTRIBUTION

Lynne worked on most of the user interface for the application. The UI of the application is important because it is what the user is experiencing. Many of the texts are more lined up and presentable to the user. Lining up the presentation and features such as date/time pickers. She also put together and edited our proposal, presentation, and our write-up. In the proposal she wrote the background of our application, for our presentation she put together our slides, and for our writeup she wrote the objective portion of the paper.

Chuong worked a lot on the personal profile aspect of our application. Without having any profiles the application is a lot less personal and would not have a chance for success. He worked with uploading profile pictures and displaying them to the user on the newsfeed. He also worked on the personalization of the profile such as letting the user add their interests, year, and major. Working with firebase we were able to create personalized profiles for each user. Chuong also wrote our objective of the application, did a demo of part of our application during our presentation, and wrote the components section of our writeup.

Daniel worked on logging in and registering users for the application. With a working verification system, a user can only have one unique username and password. This is important because we dont want spam users using our application and we want to keep a community strictly to those with a ucsc.edu email. He also wrote our abstract and timeline sections of our proposal, did a short demo and future of our application for our presentation, and wrote the abstract and development section of our write-up.

Zion worked on the newsfeed and adding events to the newsfeed. By getting the newsfeed to display with valid events, the user will now be able to view all events that are taking place and hold their own events. By using Firebase for the events, we are able to put the events onto the newsfeed with all the relevant information that the host is putting. He also wrote the Users section of the proposal, spoke about the objective of our app during the presentation, and wrote the Future Work and Contribution portion of the final write up.

## 5. FUTURE WORK

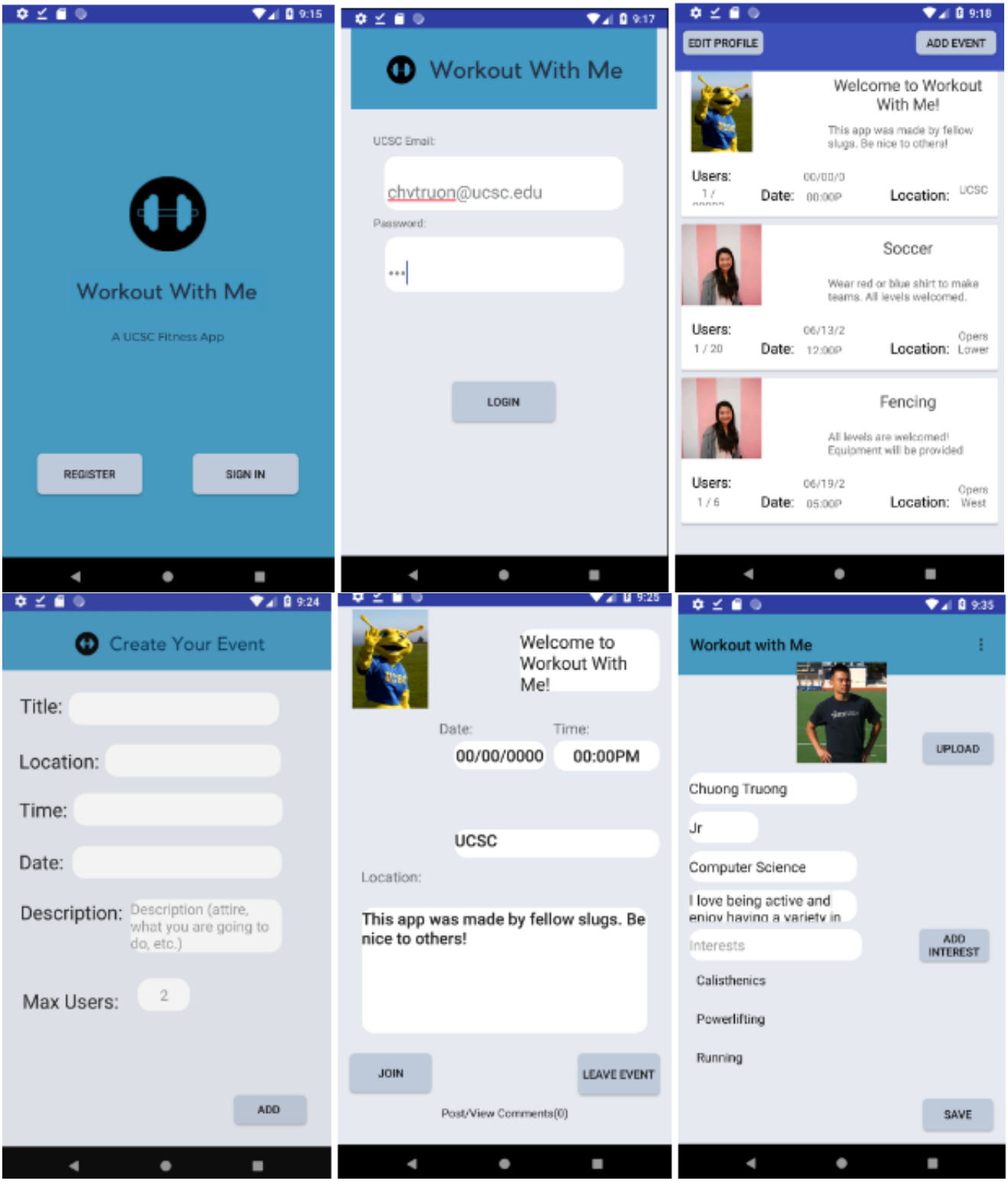
One feature that we are missing in the application is a peer to peer messaging system. Being able to message people that you join for an activity is vital to our mission of the application which is to establish connections and relationships between people interested in the same activity. With a peer to peer messaging system, a user would be able to communicate with people from the group that they might have forgot to exchange communication with. Another reason a peer to peer messaging system would be convenient to have is to message people about the event with personal questions and concerns. There are many people who feel uncomfortable with commenting publicly and showing their profiles. With a messaging system, there is a more personal and private form of communication between the two users.

The messaging system can also be used for an entire group message. A group message would be useful in case the host of the event has any other details that they would like to tell the group. For example, the host could message the same group of people again that they would like to meet up again. The host or users of the event could also post updates such as that they are running late or that the time/location of the event is changing from originally posted. Overall, a messaging communication system other than comments would be very useful in helping build personal connections with others and would also help with the fluidity of the social aspect in our application.

Another feature that would be useful is a friends system. With a friend system users would be able to invite their friends to an event to join. Another useful feature would be so that users would be notified if their friends are hosting an event and can join them. A friend system would be good for people who just met to keep a solid connection. A friend system could also be used to find people that match your interests that you could then invite for a game of basketball or soccer.

If the application is deemed successful and added these features, we could see implementing other colleges (UCI, UCSB, etc.) into the system. By doing this, each college would have their own unique feed of events. The users would only be paired with those that are in their college and would only be able to see events and users that are part of their college. We could bring each college another form of community by bringing those together with our application.

Fig. 1. Components of ”Workout With Me”



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