

Setter Stage Two

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Project Description

Setter is a mobile application for rock climbers to create, set, and discover new bouldering problems on a climbing wall. Our primary user base is focused around current and new rock climbers. The application will allow users to create new problems to climb or find other problems created by different users on the app. To create a new problem, Users will select different “holds” from a picture of the climbing wall, add a grade or difficulty to the problem, write any tips about the problem, and finally submit it for other users to view, try out, and rate. Users can try problems not created by themselves by searching for other users or by filtering different problems based on criteria such as: difficulty, rating, or location. They can then view the problem and try it out for themselves and if they so choose, rate the problem and difficulty level and/or leave a comment. Anyone can download the app and find problems to try; however, they will need to create an account in order to create, rate, or comment on problems. We expect users to use the app mostly when at a climbing centre or before leaving their house to pick out problems that they want to work on that day.

Our Stakeholders

1. **Boulderers** (Rock Climbers) – These are our primary target with the app, we want to encourage the use of the app to create community ranked problem sets. We have split this stakeholder into three subcategories to better define the user group and to help how we weigh the grading and rating voted for each problem. They will choose their skill level when signing up for the app.
 - a. **Beginners** – less than 1 year of experience. We will be weighing their votes and rankings a lower amount for difficult problems and more for easier problems, as these are new people to the sport and do not yet have the knowledge or ability to fully understand the rating system used by boulderers.
 - b. **Intermediates** – Between 1 -3 years of experience. We will not do any weighing to their votes and rankings.
 - c. **Advanced** – More than 3 years of experience. Their votes will be weighed more for difficult problems and weighing their votes normally for easier problems.
2. **Gym Owners / Staff** – Focusing on pushing the app into the hands of Owners and Staff will allow us to get the app out to more people. This stakeholder group will hopefully get their gym members to join the application when using the climbing wall. We will be focusing on them using the app and promoting it at their gyms.
3. **New Rock Climbers** – Online advertisements for the app describing how easy bouldering can be using the app can get new people who have been wanting to learn to make the jump and start bouldering. They will then also download and use the app, adding another person to the users.
4. **Developers** – We are the stakeholders who will be building and maintaining the application, some of us are boulderers and will use our first-hand knowledge to create the application while others will be using the research methods discussed below to create the best application possible.

User Research Methods

Survey Justification

The first user research method chosen is the survey. We chose this investigative method because we aimed to elicit information about our target audience (boulder's) to better understand our applications requirements. Also, the survey allowed our group to reach a larger audience than any of the other investigative alternatives. Specifically, we were able to conduct research that targeted U of C students who are members of the U of C Bouldering club. After collecting our survey's results, our findings have helped us identify important information about our potential user base's needs in an application. First, the majority of participants to our survey were between the ages of 18-24, which is no surprise as this age group represents the majority of university students. Second, years spent rock climbing was a relatively uniform distribution between the options listed: Less than 1 year, 1-2 years, 3-5 years and 5 years plus. The majority of our participants were categorized in an "intermediate" level of climbing. Third, most users currently do not use an application to help set their problems (routes). If they were to use an application, the majority of users would like to see filtering by grade, offline problem viewing, community grading and personal statistics. Those participants who currently use an application cited problems with community grading and the inability to provide feedback or any commentary for the problems.

Interview Justification

We chose to interview as our second research method. We thought that it would be useful to directly talk to potential users of the app to get more detailed and in depth answers than a survey would. The interview was tailored to focus more on the specifics of our design, and to gather information on what is important to our users and their preferences. We found that ease of use is a big priority for many that were interviewed. Offline features were also heavily requested, due to there not being internet connections at many bouldering locations. We also found that most people were not already using any apps similar to ours, and the few that were had problems or were not completely satisfied.

Survey Reflection

Overall, we believe the survey was successful. A larger pool of data gave us well-rounded results to the questions we asked of our survey participants. Moving forward, we will be able to use our findings and apply them towards creating a more thoughtful design. Although, we do believe we could draw from a larger candidate pool in the future. Our research was focused primarily towards university students which resulted in capturing a demographic of primarily climbers in their early twenties. To combat this, we would like to extend our survey and gather more responses over different segments of climbers.

Interview Reflection

We thought that most of our interviews went quite well. Being face to face with someone led most people to be more verbose and detailed in their answers compared to a survey. However, we did have problems finding candidates, as many were not interested in being interviewed. To alleviate this problem, we could try adding incentives or change locations, as we interviewed mostly at the bouldering wall where many people were busy climbing.

Task Descriptions

Registration – Bob is a beginner boulderer hoping to find an app that helps map his problems. He downloads the application and a bright button labeled as “Sign up” immediately captures his attention. He presses the button and is greeted with a form that asks for his email address. He enters his email address and presses “next”. He is then prompted by a form that asks him to enter a username and password. He takes a couple minutes to think, and enters his old World of Warcraft username along with his password. The input field for the password shows a red cross, indicating that his password isn’t secure enough. Bob adds a few characters to his password and the red cross turns into a green checkmark. He presses the “Finish” button and completes his registration. The next page prompts Bob to fill out his profile. He notices that there’s a button labelled as “Skip for now”, but he decides to fill in the information. He fills out his name, age, gender, indoor rock climbing disciplines he does and his level of expertise in each category and exits the app.

Logging in – Bob is about to go bouldering and remembers he downloaded a climbing app. He opens the app and sees two buttons. One primary button labelled as “Sign up” and a secondary button labelled as “Log in”. He presses login and is greeted by an input form asking for his username and password. He enters his username, password and presses the primary “Log in” button and he is logged in.

Creating a new Problem – Emily, an experienced boulder, just completed a new problem at the university’s bouldering wall. She enjoyed this problem as it was challenging and really tested her skills. Now, Emily would like to remember the problem she just completed to save for another date. First, she checks if the current configuration of the wall is up to date on the gym’s photo in the application. The wall has since changed from the most recent photo, so Emily uses her device to take a photo of the climbing wall to upload for the new configuration. Emily uploads the photo for the university’s climbing page. Then, she marks where her problem starts and finishes on the photo and highlights the rest of the problem she completed. Emily is unsure of what difficulty rating to mark her newly created problem before uploading. She makes an educated guess based on her own experience and uploads the problem along with associated difficulty rating. Other climbers at the university will now be able to try and rate the problem.

Filtering by Difficulty / Holds / Gyms – Jack is an experienced climber and he is looking to challenge himself. He finds that the set problems at his local climbing gym are too easy and wonders if there’s an alternative way to filter for problems. He opens the app and navigates to the filter by difficulty option for his gym. He presses the top result and nods in agreement with the difficulty score before setting his phone down.

Viewing Problem – Jeremy just arrived at his local gym to find out that they have set up a systems wall. The local gym did this to allow users to create and share their own problems and recommended an app for climbers to accomplish this. Jeremy downloads the app on his phone and selects his local gym to view the problems that have been set. The app loads an image of the wall with the holds in the problem highlighted. Once he completes the problem, he notices that he can check the route off as complete but when he presses the complete button it directs him to the registration page as he hasn’t created an account yet.

Community Rating the Problem – Brandon is attempting to complete a boulder problem but is finding this one quite challenging. He verifies the grade on the app to see if he is mistakenly attempting a much harder problem and realizes he is not mistaken. Since this is a grade that Brandon regularly climbs, he decides to give the problem a more accurate grade. He views the problem again and sees that the grading has not been changed, this is because not everyone has agreed with him.

Downloading Problems – Alicia is planning on heading to the climbing gym tomorrow, but she knows that the gym does not have WiFi. She remembers that her climbing app allows her to download problems so that she can view them later when not connected to WiFi and not use any mobile data. She navigates to the downloads page, selects the gym, but decides that she doesn't need to download all the problems as this may take up too much room on her phone. She decides to select all problems that she would like to try, and presses download.

Viewing yours and your friends Stats Page – Colleen has just started climbing recently after her friends invited her to come climbing with them. She has gotten really into it and has now started going on her own every now and then but being so new she isn't always sure which problems to try. She is quite strong and can climb about as good as her friends, so she navigates to her friend Alicia's stats page on the app to see the problems that Alicia has climbed recently. After climbing and checking off a few of the problems that Alicia has done Colleen decides to check out her own stats. She goes to the pages and views the grade she climbs most, as well as how many climbs she has completed, and attempted.