Evaluation Plan for
Rock Climbing Mobile Application

Jacob Boyk
CS 352 - Group 2
boykj@oregonstate.edu

Kira Corbett
CS 352 - Group 2
corbetki@oregonstate.edu

Michael Fagan
CS 352 - Group 2
faganmi@oregonstate.edu

Marji Symonds
CS 352 - Group 2
symondsm@oregonstate.edu

1.   TECHNIQUES AND ORDERING

After completing research on our rock climbing mobile application, an analytical and empirical study is to be conducted. The analytical study will take place as a cognitive walkthrough and to help our team identify the usability of the application for the first time user. This will allow for potential problems to be ruled out prior to user testing. The second study that will take place is an empirical evaluation with a local rock climber. This will help us learn about the user's thought process navigating the application.

The analytical evaluation will be completed first. This is because a practicing the mindset of a first time user will allow us to ask questions touring our user interface (UI) while identifying user characteristics and typical tasks associated with those users' persona.

Following the analytical evaluation, we will complete our empirical evaluation. Having questions prepared before our user's actual walkthrough will help us conduct an organized user evaluation to collecting quality observations.

2.   ANALYTICAL TECHNIQUE:
Cognitive Walkthrough
2.1 Technique Reasoning

We decided to use a cognitive walkthrough because it will give us a clearer understanding of how it might feel to actually use our app to find a route. We will do the walkthrough before the empirical analysis to try and catch any issues they might encounter. This way, we can use the cognitive walkthrough to make the user process clear as possible before testing on an actual user. We hope to identify and resolve any gulf of execution or gulf of evaluation problems.

2.2 Task Evaluating

Our cognitive walkthrough with will include step by step navigation of find a route via by most popular routes. We will use this walkthrough to better understand flow, problem pages, or areas of high distraction. Furthermore, this will highlight any areas that need work before the empirical technique evaluation.

3.   EMPIRICAL TECHNIQUE
3.1 Technique Reasoning

Since our application is still in the early prototype stages, we decided to let our test user run through a detailed storyboard containing all relevant screens to find a route via most popular. This will allow the user a basic understanding of navigation and searching for information utilizing our built in features. After completion of the analytical walkthroughs, we plan to have a solid ideas on areas for improvement and our own observations. It will be vital to cross reference the data from both evaluations and see how a user on the outside will review.

It's vital to understand how a user will utilize our application considering they haven't been developing since day 1. We want to observe how the user will experience our interface and interact with different features. We can't design a user experience, only our UI.

3.2 Task Evaluating

We plan to utilize the empirical "Think out Loud" strategy and let the user run through a detailed storyboard of finding a route via most popular to hear observations and record findings accordingly.

3.3 User

The user for empirical testing will be a local climber. They will be in a neutral setting, without distractions. This user is the target audience for our app and by eliminating distractions, it will make focusing on the tasks easier to complete. Testing on a climber is ideal since they have a set idea of what a good experience would look like and they have some expectations we need to meet for the app to be successful.

3.4 Data

We will be collecting observations as the user works their way through the slide. They will describe if there are any areas in the app that aren't descriptive or appear troublesome to navigate. This

will give us an idea of what areas need to be addressed and revised. We will also observe the user as they are stepping through the process to take note of their expressions and reactions as well as verbal feedback

3.5 Relation of Data

We're looking to see how users work their way through the app and also what some troublesome areas for the users are. With the user speaking out-loud their thoughts as they work their way through the app, we'll be able to revise the interface to make the experience more thoughtful. When the user describes an area that is hard to navigate or confusing, we'll know what areas need to be heavily revised. This means possibly returning to the drawing board and revising the flow of our storyboard.

4.   MATERIALS & PROCESS

4.1 Cognitive Walkthrough Materials
- Working prototype/storyboard
- Data form to record observations

4.2 Cognitive Walkthrough Process

Our group will walk through the storyboard while taking note of important findings and information, as well was possible changes we want to make. At each step, we will write down our answers to the following questions:

- Will the user know what to do?
- Will the user see how to do it?
- Will the user understand from feedback whether their action was correct?

The answers to these questions will inform any changes we will make. We will each take additional notes about we we think might cause problems or distractions and what we think the solutions might be.

4.3 Empirical Evaluation

- Cell Phone / Digital Recorder for voice playback after completion
- Working prototype/storyboard
- Data form to record observations
    - Observations include body language, user expressions, reactions, etc.

    Overall time the user spent completing the task

    - Any other general observation
    - Time and setting where the evaluation took place
- Data form to record any questions the user has about application
    - Additional questions the user may have
   - Suggestions or critiques

4.4 Follow Up Questions

- Were there any features that you struggled with?
- What do you remember from the application?
- Was it user friendly and easy to navigate?
- How likely are you to recommend this application to a friend?
- Was the system easy to use and understand?

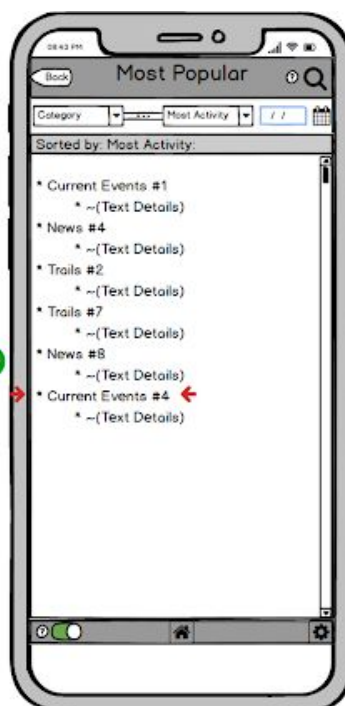# 5.   PARTICIPATION

5.1 Contributions

Each group member contributed to the evaluation plan as a whole. In other words, we brainstormed and thoroughly thought out the evaluation plan together as a whole group before distributing the written sections. This was important for us to make sure that everyone's input was included and that our plan made sense going forward.

Welcome Screen:

Enter User Name
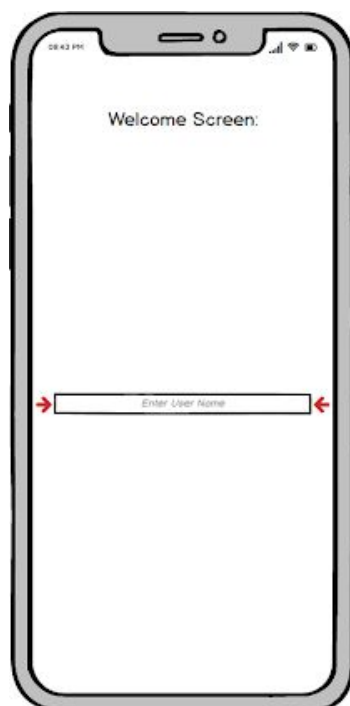
1. User will login then be redirected to home index page

Popular | Routes | Home | User | Settings
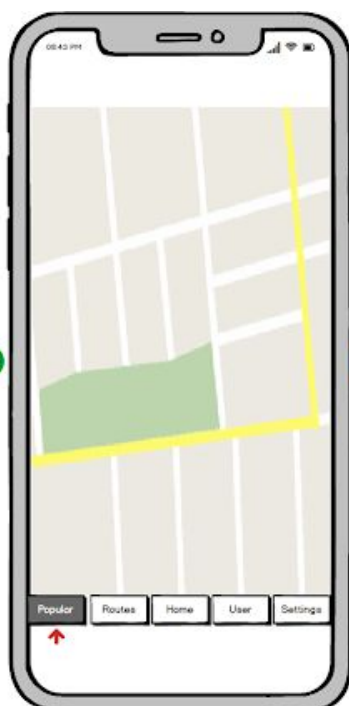
2. To find most popular:
User will direct to the Popular button at bottom left of home index

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Most Popular

Back | Most Popular | Q

Category ▼ — Most Activity ▼ / /

Sorted by: Most Activity:

* Current Events #1
    * ~(Text Details)
* News #4
    * ~(Text Details)
* Trails #2
    * ~(Text Details)
* Trails #7
    * ~(Text Details)
* News #8
    * ~(Text Details)
* Current Events #4
    * ~(Text Details)
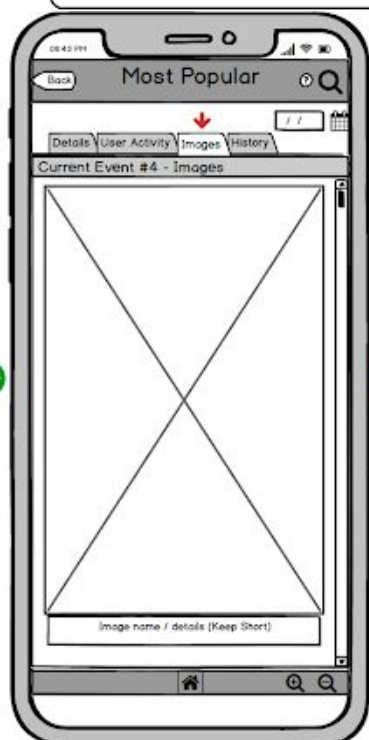
3. Selection of Post:
Each individual link will be viewable/interactable
Clicking will redirect to a sub page including relevant information

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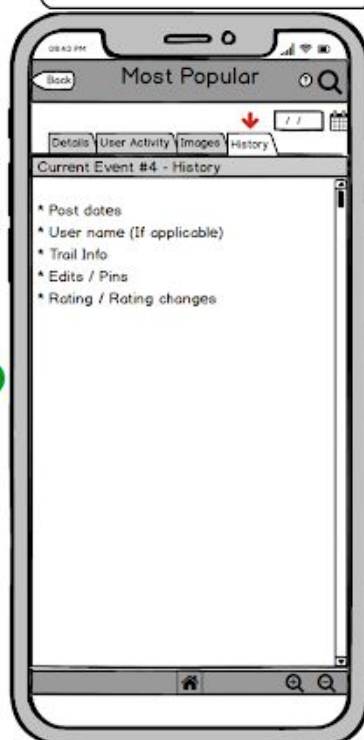Back | Most Popular | Q

/ /

Details | User Activity | Images | History

Current Event #4 - Details

* Tabs will contain relevant data to respective topic

4. Subpage will contain panels with respective info on the category
Default is set to details

Back | Most Popular | Q

/ /

Details | User Activity | Images | History

Current Event #4 - Images

User name*
Timestamp:
    Comment (if Applicable)
    Pings
    Relevant information

    User name*
    Timestamp:
        Comment (if Applicable)
        Pings
        Relevant information

User name*
Timestamp:
    Comment (if Applicable)
    Pings
    Relevant information

    User name*
    Timestamp:
        Comment (if Applicable)
        Pings
        Relevant information

User name*
Timestamp:
    Comment (if Applicable)
    Pings
    Relevant information

4. Subpage will contain panels with respective info on the category
Default is set to details

Back | Most Popular | Q

/ /

Details | User Activity | Images | History

Current Event #4 - Images

Image name / details (Keep Short)
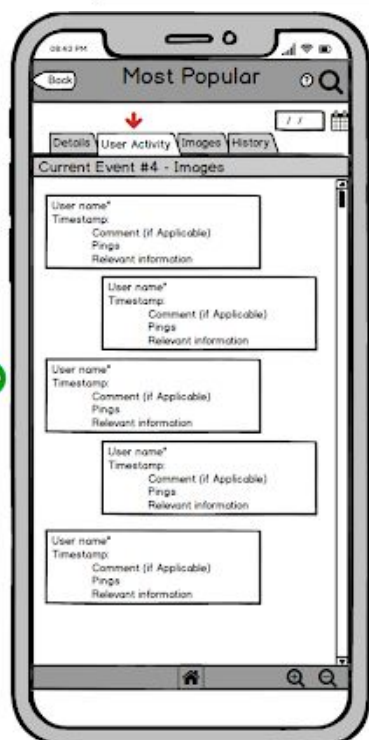
5. Images page:
Will display all images related

Back | Most Popular | Q

/ /

Details | User Activity | Images | History

Current Event #4 - History

* Post dates
* User name (If applicable)
* Trail Info
* Edits / Pins
* Rating / Rating changes

5. History:
All other relevant post information:
Including user name, edits, pins, favorites, etc.