Final Project for
Rock Climbing Mobile Application

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1. PROBLEM & USERS

1.1 Problem

Currently, there are not a lot of helpful rock climbing resources using today's technology. In fact, most of the resources are still paper books, which are often hard to find, overpriced, or only a specific sector of a recreational area. There is not a reliable resource that climbers can access easily and on-the-fly which allows them to plan safe, fun climbing outings.

Our mobile rock climbing application will allow for any climber to search for local climbing routes with the most up to date information reported by community members. We plan to allow users to have an account to save their favorite routes and list planned routes for the future, as well as to give feedback to other users of the app. We will provide flexibility to users with filtering options for things like parking, difficulty, type of rock, nearby amenities, and accessibility.

1.2 Target Users

Our target users are primarily rock climbers. Mostly physically able, relatively fit people ranging from teens to middle-aged adults of any gender. Target users may range in skill from beginner to advanced but will have some existing knowledge of how to climb. Most users should have some experience climbing outdoors or at least have an interest in learning to climb outdoors.

2. PROTOTYPE

2.1 Justifications - Design Principles

Many of the design decisions that we made were based on the insights we received after interviewing some local climbers. We noted that to these climbers, any information regarding the accessibility of a climbing area was very important. We decided to use this insight to make information regarding not only the accessibility of the area available but also make sure that the approaches of specific climbs were available as well!

Another insight we received was that books might have outdated information regarding a climb. A foothold might have broken off or a spider might have taken refuge in one of the finger pockets! We thought that since routes could always be changing that the route information that's available should also change as well. We decided that there should be a "history" area for each climb where users can track changes for not only the difficulty but for hazards as well.

Lastly, one of our predispositions was that we knew climbers wouldn't want to waste time looking for climbs that they might like. Providing users with this information right off of the bat was a large consideration when designing this app. Right on the main screen, we've got a popular section that users can look at to get the highest rated climbs in their area. If they're looking for something a bit more specific then they can use the filter function to find both different difficulty times

2.2 Justifications - Feedback from Prior Feedback

We did not receive feedback from grading materials but we relied on our user feedback in our evaluations.

2.3 Justifications - Analytical Work

The overall task we were assessing in our analytical analysis was to ask users to select a popular rock climbing route. This task was important because it stress-tested different parts of the application.

Our analytical analysis gave our usability group potential ideas to modify components in our current application. One good example of this was learning that our application did not incorporate a uniform user interface across the whole application so adding essential elements including back buttons and home buttons on every page was necessary.

2.4 Justifications - Analytical Work

Our empirical results of the "Think Aloud" activity provided insights into where our application is clear and where our user became confused. When the user was filtering route by the level of difficulty, they showed some confusion on which dropdown menu to click. Although the dropdown menu was intuitive to the user, the vocabulary was a bit troublesome to find the right information. Because of this confusion, we decided to implement vocabulary that is more familiar to the user.

Additionally, during the empirical evaluation when the user was asked to change application settings, they demonstrated some confusion by reaching a conflict in the application. During this task, the user was to change their application settings but could not decide to click the "back" button or the "home" button to start

the task. After this realization, we decided to implement clear global program features (e.g. home button, back, etc.).

3. PARTICIPATION

3.1 Contributions

All group members played an active role throughout this project. Each member contributed concepts to the final prototype for our rock climbing application and actively worked together to write up each project.

Our specific roles decided at the beginning of the term were: Jacob (Writer)

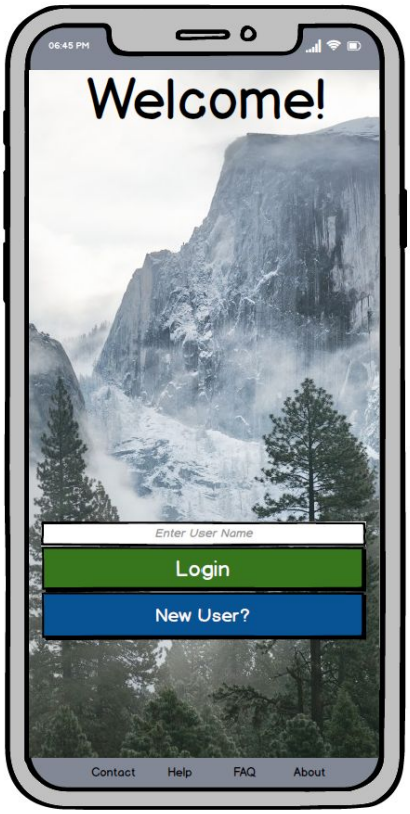
Irish (User Communication)

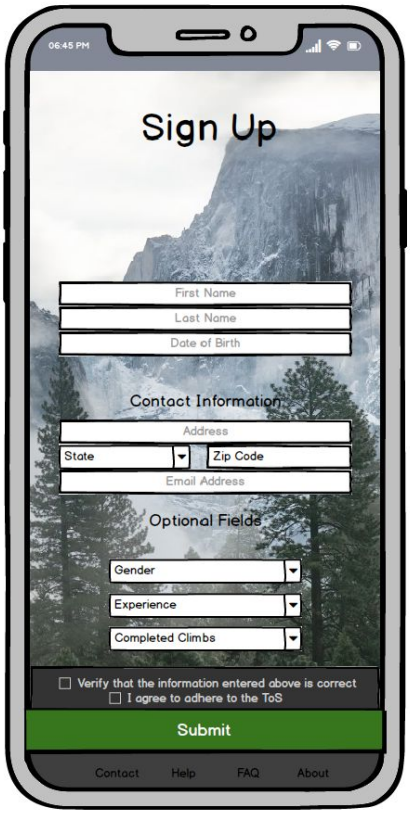
Marji (Visual Design)

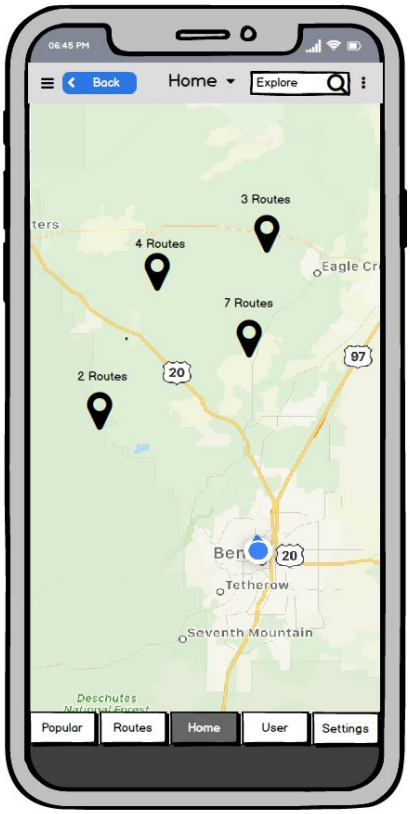
Kira (Leadership/Coordination)

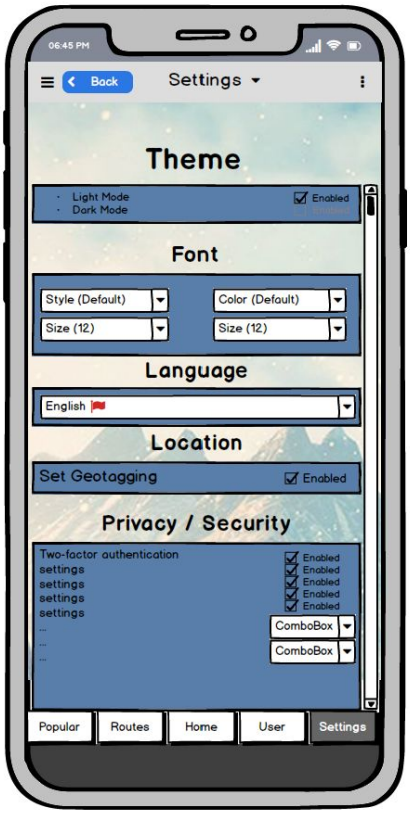
Jacob was our dedicated writer which started as working on our team sketches then later turned into working in Balsamiq a lot by tying our Balsamiq prototypes together. Irish was our primary person to user communication and gathering data from the rock climbing community. Marji was our visual design editor and verified that all of our documents not only visually appealing but also that our documents met class requirements. Kira was primarily the organizer and helped coordinate projects, deadlines, and communication between members.

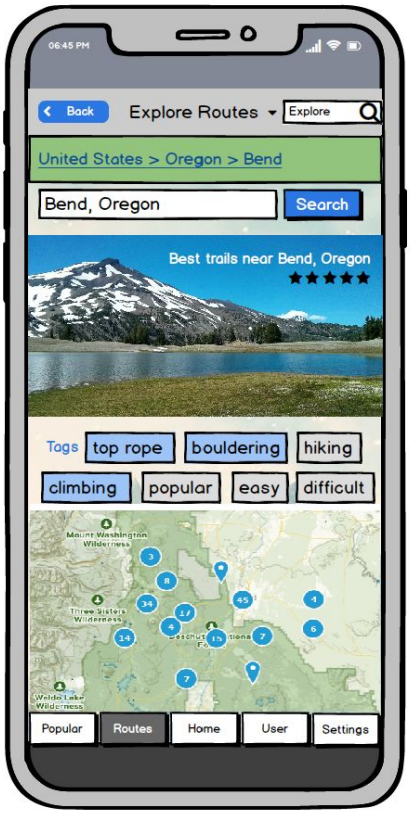
4. SCREENS

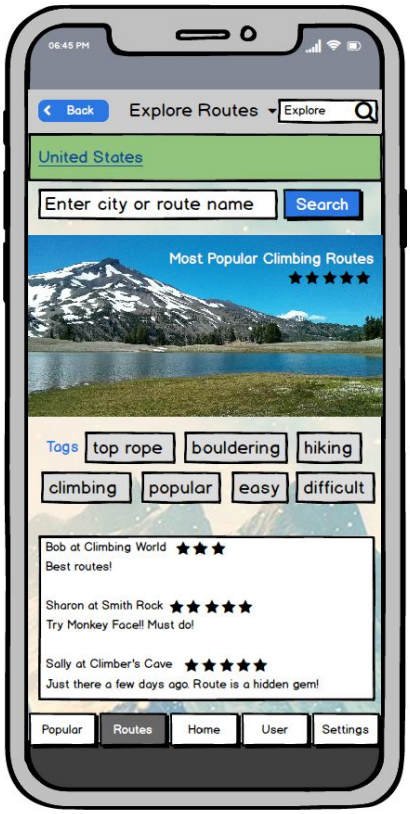




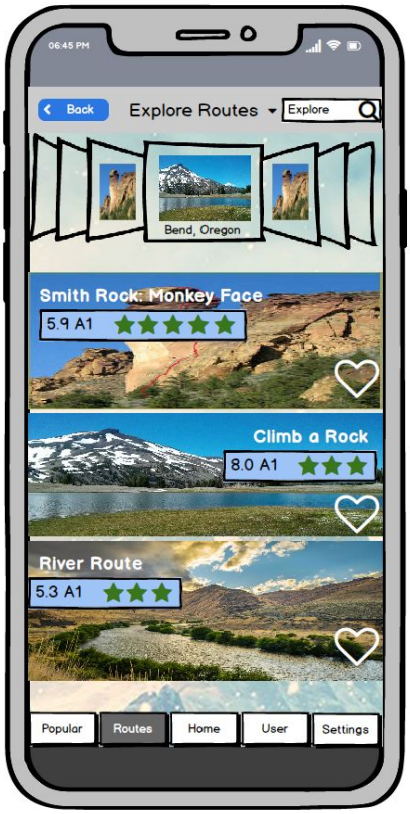


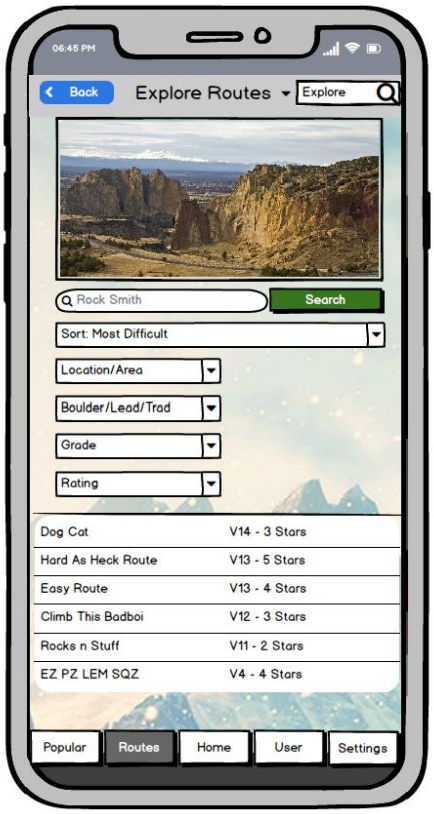

06:45 PM
Back
Settings
Theme
Light Mode
Dark Mode
Enabled
Font
Style (Default)
Color (Default)
Size (12)
Size (12)
Language
English
Location
Set Geotagging
Enabled
Privacy / Security
Two-factor authentication
settings
settings
settings
settings
Enabled
Enabled
Enabled
Enabled
Enabled
ComboBox
ComboBox
Popular
Routes
Home
User
Settings

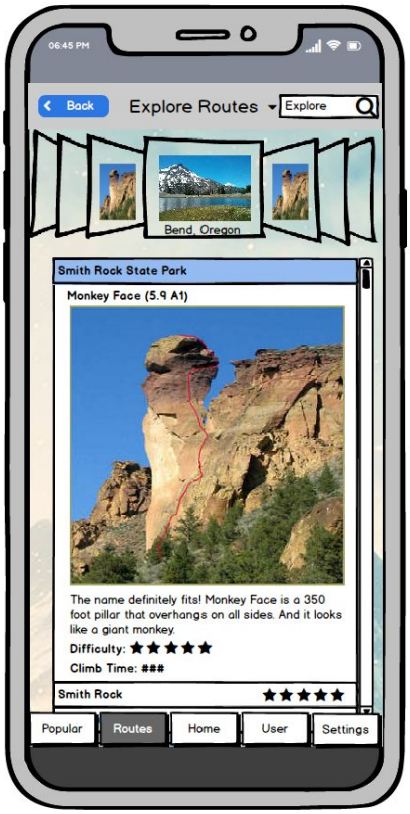

06:45 PM
Back
Explore Routes
Explore
United States > Oregon > Bend
Bend, Oregon
Search
Best trails near Bend, Oregon
Tags
top rope
bouldering
hiking
climbing
popular
easy
difficult
Popular
Routes
Home
User
Settings

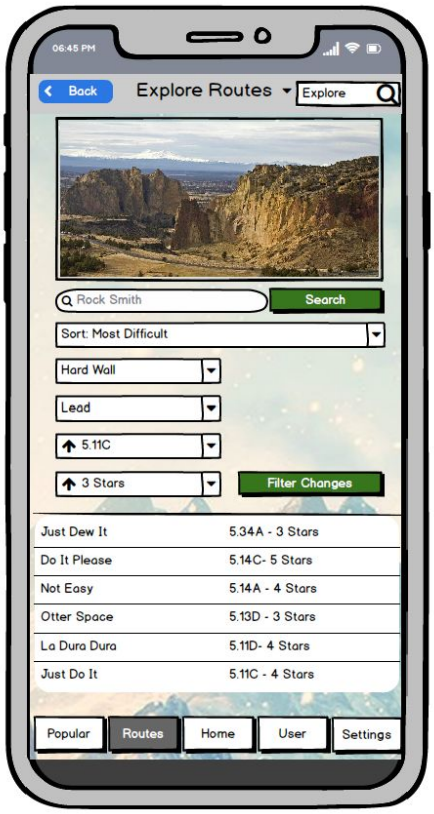

06:45 PM
Back
Explore Routes
Explore
United States
Enter city or route name
Search
Most Popular Climbing Routes
Tags
top rope
bouldering
hiking
climbing
popular
easy
difficult
Bob at Climbing World
Best routes!
Sharon at Smith Rock
Try Monkey Face!! Must do!
Sally at Climber's Cave
Just there a few days ago. Route is a hidden gem!
Popular
Routes
Home
User
Settings

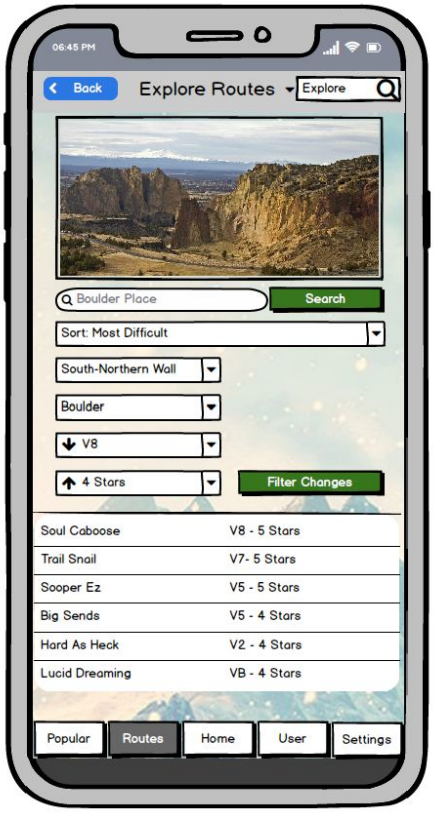

06:45 PM
Back
Explore Routes
Explore
United States > Oregon > Bend
Bend, Oregon
Search
Best trails near Bend, Oregon
Tags
top rope
bouldering
hiking
climbing
popular
easy
difficult
Popular
Routes
Home
User
Settings

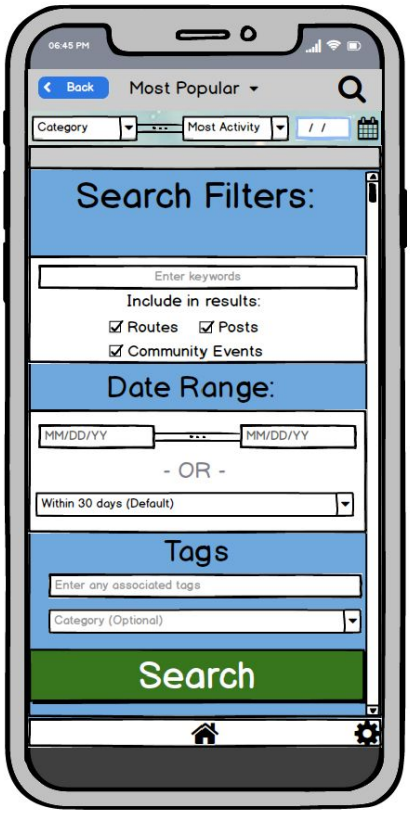

06:45 PM
Back
Explore Routes
Explore
Bend, Oregon
Smith Rock: Monkey Face
5.9 A1
Climb a Rock
8.0 A1
River Route
5.3 A1
Popular
Routes
Home
User
Settings

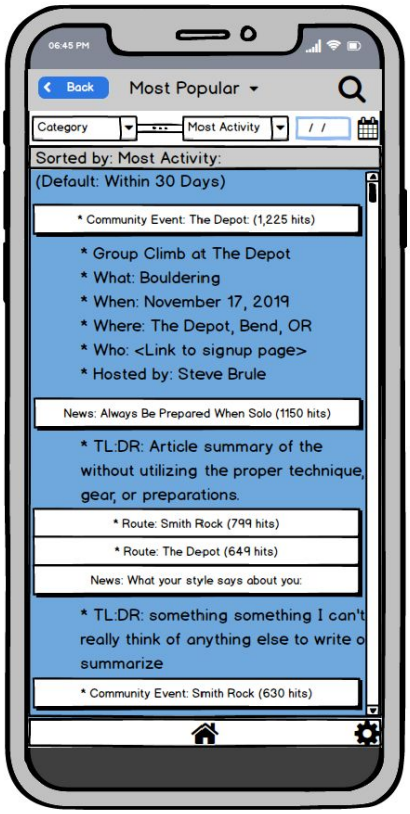

06:45 PM
Back
Explore Routes
Explore
Rock Smith
Search
Sort: Most Difficult
Location/Area
Boulder/Lead/Trad
Grade
Rating
Dog Cat V14 - 3 Stars
Hard As Heck Route V13 - 5 Stars
Easy Route V13 - 4 Stars
Climb This Badboi V12 - 3 Stars
Rocks n Stuff V11 - 2 Stars
EZ PZ LEM SQZ V4 - 4 Stars
Popular
Routes
Home
User
Settings

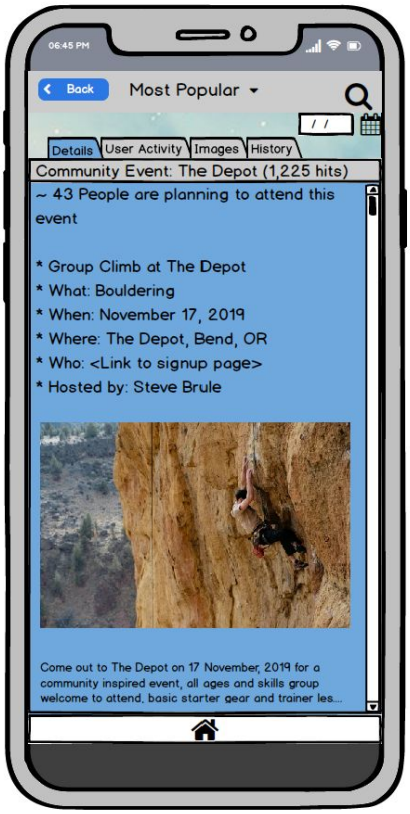

06:45 PM
Back
Explore Routes
Explore
Bend, Oregon
Smith Rock State Park
Monkey Face (5.9 A1)
The name definitely fits! Monkey Face is a 350 foot pillar that overhangs on all sides. And it looks like a giant monkey.
Difficulty:
Climb Time: ###
Smith Rock
Popular
Routes
Home
User
Settings

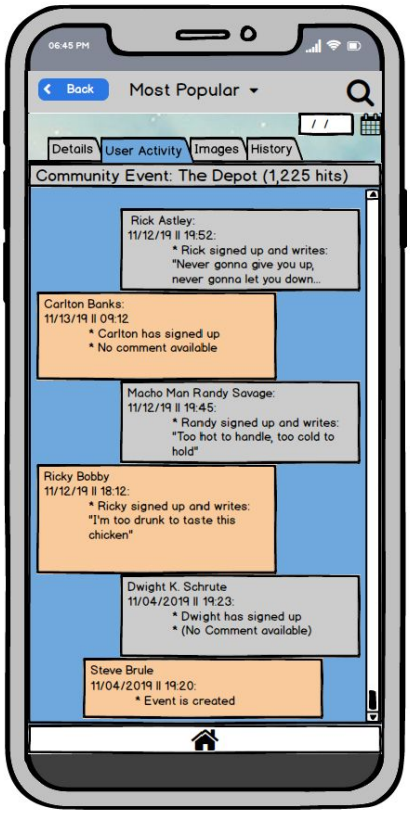

06:45 PM
Back
Explore Routes
Explore
Rock Smith
Search
Sort: Most Difficult
Hard Wall
Lead
5.11C
3 Stars
Filter Changes
Just Dew It 5.14A - 3 Stars
Do It Please 5.14C- 5 Stars
Not Easy 5.14A - 4 Stars
Otter Space 5.13D - 3 Stars
La Dura Dura 5.11D- 4 Stars
Just Do It 5.11C - 4 Stars
Popular
Routes
Home
User
Settings

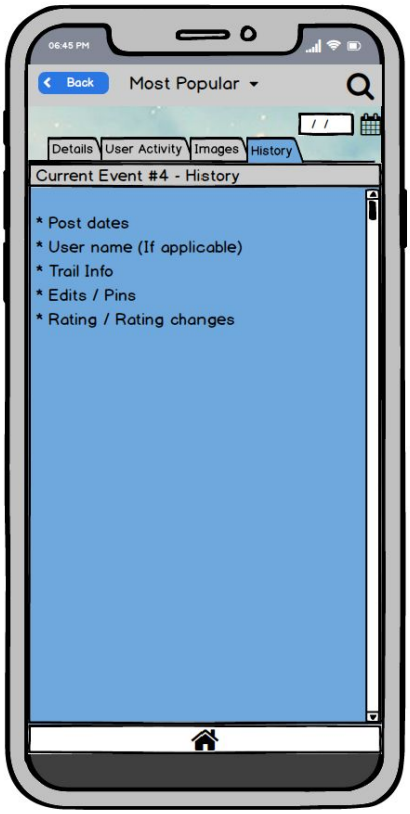

06:45 PM
Back
Explore Routes
Explore
Boulder Place
Search
Sort: Most Difficult
South-Northern Wall
Boulder
V8
4 Stars
Filter Changes
Soul Caboose V8 - 5 Stars
Trail Snail V7- 5 Stars
Sooper Ez V5 - 5 Stars
Big Sends V5 - 4 Stars
Hard As Heck V2 - 4 Stars
Lucid Dreaming VB - 4 Stars
Popular
Routes
Home
User
Settings


06:45 PM
Back
Most Popular
Category
Most Activity
Search Filters:
Enter keywords
Include in results:
Routes
Posts
Community Events
Date Range:
MM/DD/YY
MM/DD/YY
- OR -
Within 30 days (Default)
Tags
Enter any associated tags
Category (Optional)
Search


06:45 PM
Back
Most Popular
Category
Most Activity
Sorted by: Most Activity:
(Default: Within 30 Days)
* Community Event: The Depot: (1,225 hits)
* Group Climb at The Depot
* What: Bouldering
* When: November 17, 2019
* Where: The Depot, Bend, OR
* Who: <Link to signup page>
* Hosted by: Steve Brule
News: Always Be Prepared When Solo (1150 hits)
* TL:DR: Article summary of the
without utilizing the proper technique,
gear, or preparations.
* Route: Smith Rock (799 hits)
* Route: The Depot (649 hits)
News: What your style says about you:
* TL:DR: something something I can't
really think of anything else to write o
summarize
* Community Event: Smith Rock (630 hits)

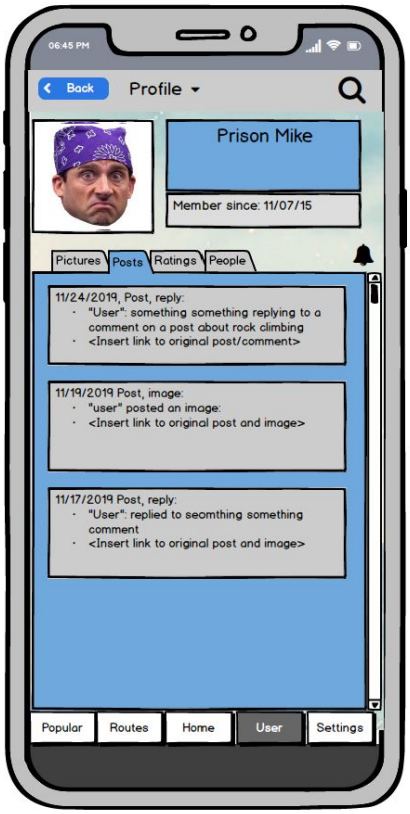

06:45 PM
Back
Most Popular
Details
User Activity
Images
History
Community Event: The Depot (1,225 hits)
~ 43 People are planning to attend this
event
* Group Climb at The Depot
* What: Bouldering
* When: November 17, 2019
* Where: The Depot, Bend, OR
* Who: <Link to signup page>
* Hosted by: Steve Brule
Come out to The Depot on 17 November, 2019 for a
community inspired event, all ages and skills group
welcome to attend, basic starter gear and trainer les...

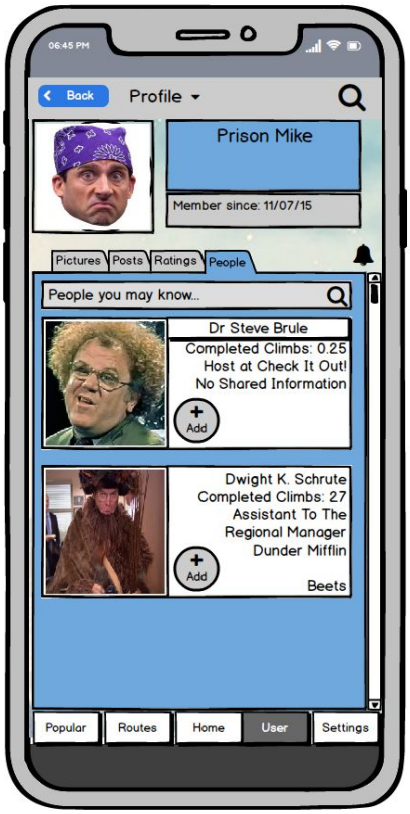

06:45 PM
Back
Most Popular
Details
User Activity
Images
History
Community Event: The Depot (1,225 hits)
Rick Astley:
11/12/19 || 19:52:
* Rick signed up and writes:
"Never gonna give you up,
never gonna let you down...
Carlton Banks:
11/13/19 || 09:12
* Carlton has signed up
* No comment available
Macho Man Randy Savage:
11/12/19 || 19:45:
* Randy signed up and writes:
"Too hot to handle, too cold to
hold"
Ricky Bobby
11/12/19 || 18:12:
* Ricky signed up and writes:
"I'm too drunk to taste this
chicken"
Dwight K. Schrute
11/04/2019 || 19:23:
* Dwight has signed up
* (No Comment available)
Steve Brule
11/04/2019 || 19:20:
* Event is created

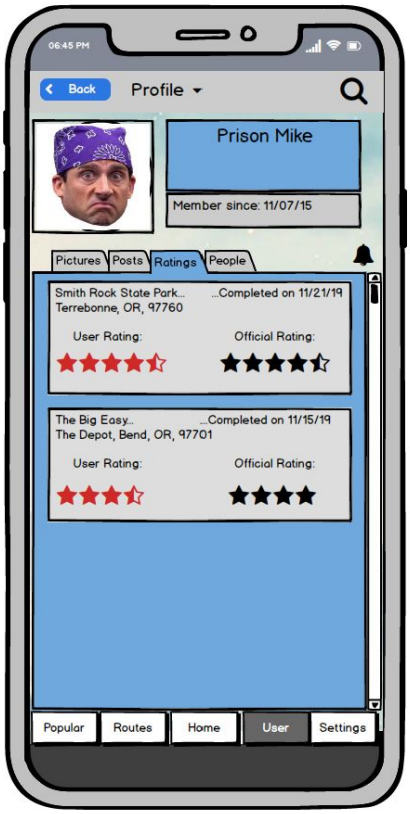

06:45 PM
Back
Most Popular
Details
User Activity
Images
History
Current Event #4 - History
* Post dates
* User name (If applicable)
* Trail Info
* Edits / Pins
* Rating / Rating changes


06:45 PM
Back
Most Popular
Details
User Activity
Images
History
Community Event: The Depot (1,225 hits)
Captain Drangus #1
Photo Credit ~Steve Brule

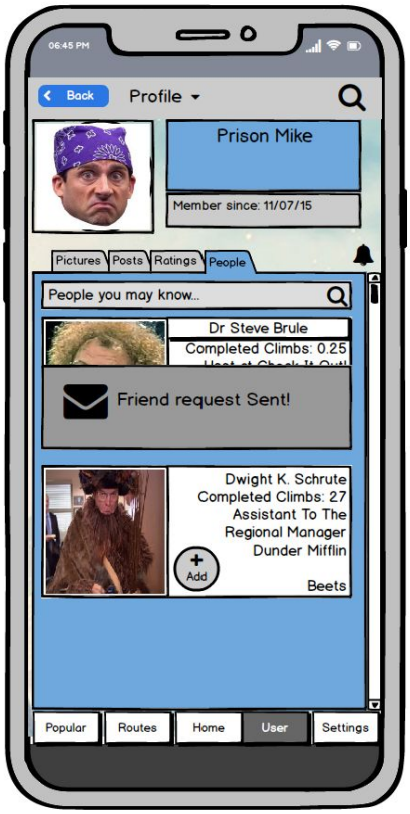

06:45 PM
Back
Profile
Prison Mike
Member since: 11/07/15
Pictures
Posts
Ratings
People
Smith Rock, 11/21/19
Some big rock 11/19/19
Popular
Routes
Home
User
Settings


06:45 PM
Back
Profile
Prison Mike
Member since: 11/07/15
Pictures
Posts
Ratings
People
11/24/2019, Post, reply:
"User": something something replying to a comment on a post about rock climbing
<Insert link to original post/comment>
11/19/2019 Post, image:
"user" posted an image:
<Insert link to original post and image>
11/17/2019 Post, reply:
"User": replied to seomthing something comment
<Insert link to original post and image>
Popular
Routes
Home
User
Settings


06:45 PM
Back
Profile
Prison Mike
Member since: 11/07/15
Pictures
Posts
Ratings
People
People you may know...
Dr Steve Brule
Completed Climbs: 0.25
Host at Check It Out!
No Shared Information
Add
Dwight K. Schrute
Completed Climbs: 27
Assistant To The Regional Manager
Dunder Mifflin
Beets
Add
Popular
Routes
Home
User
Settings

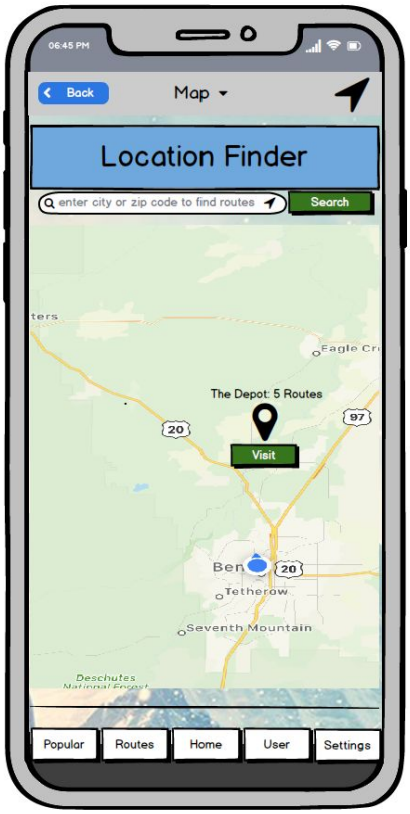

06:45 PM
Back
Profile
Prison Mike
Member since: 11/07/15
Pictures
Posts
Ratings
People
Smith Rock State Park...
Terrebonne, OR, 97760
...Completed on 11/21/19
User Rating:
Official Rating:
The Big Easy..
The Depot, Bend, OR, 97701
...Completed on 11/15/19
User Rating:
Official Rating:
Popular
Routes
Home
User
Settings

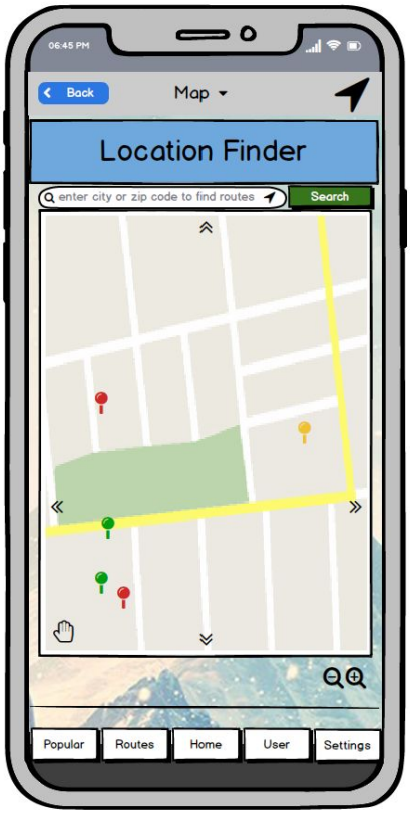

06:45 PM
Back
Profile
Prison Mike
Member since: 11/07/15
Pictures
Posts
Ratings
People
People you may know...
Dr Steve Brule
Completed Climbs: 0.25
Alert!
Are you sure you want to add this person?
No
Yes
Popular
Routes
Home
User
Settings

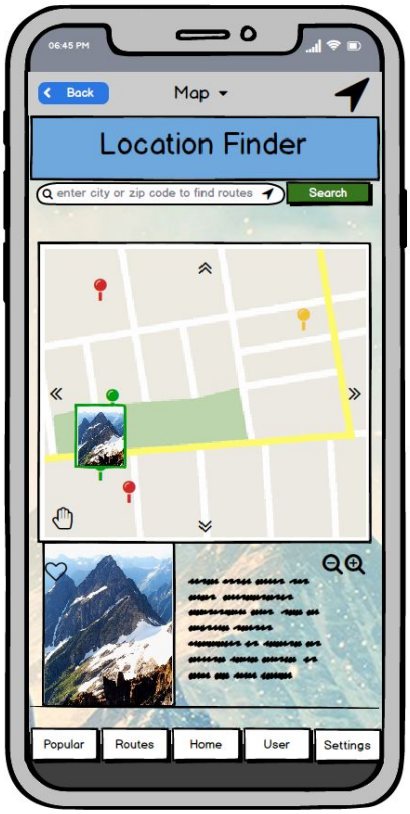

06:45 PM
Back
Profile
Prison Mike
Member since: 11/07/15
Pictures
Posts
Ratings
People
People you may know...
Dr Steve Brule
Completed Climbs: 0.25
Friend request Sent!
Dwight K. Schrute
Completed Climbs: 27
Assistant To The
Regional Manager
Dunder Mifflin
Add
Beets
Popular
Routes
Home
User
Settings


06:45 PM
Back
View Profile
Dr. Steve Brule
Host at Check it out!
Captain drangus
Member since: 12/11/98
Pictures
Posts
Ratings
11/12/19 - Steve Brule posted a picture:
IT'S LONELY
AT THE TOP
11/04/19 - Steve Brule created an event
Community Event: The Depot: (1,225 hits)
Popular
Routes
Home
User
Settings

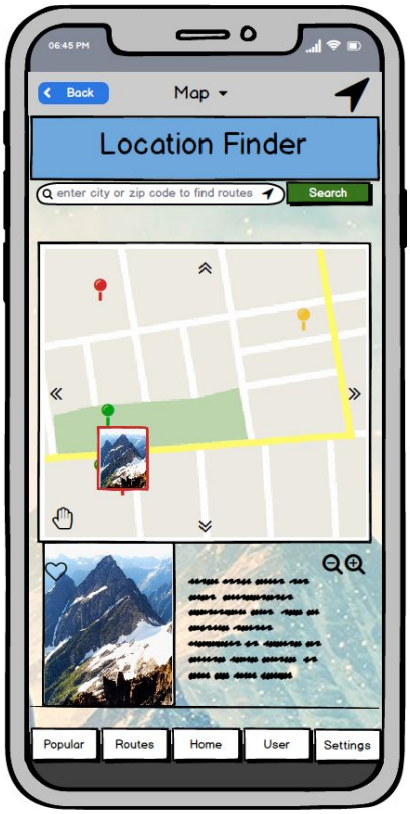

06:45 PM
Back
View Profile
Dr. Steve Brule
Host at Check it out!
Captain drangus
Member since: 12/11/98
Pictures
Posts
Ratings
11/12/19 - Steve Brule posted a picture:
IT'S LONELY
AT THE TOP
Popular
Routes
Home
User
Settings


06:45 PM
Back
Map
Location Finder
enter city or zip code to find routes
Search
The Depot: 5 Routes
Visit
20
97
Bend
Tetherow
Seventh Mountain
Deschutes
Popular
Routes
Home
User
Settings


06:45 PM
Back
Map
Location Finder
enter city or zip code to find routes
Search
Popular
Routes
Home
User
Settings


06:45 PM
Back
Map
Location Finder
enter city or zip code to find routes
Search
Popular
Routes
Home
User
Settings


06:45 PM
Back
Map
Location Finder
enter city or zip code to find routes
Search
Popular
Routes
Home
User
Settings


06:45 PM
Back
Map
Location Finder
enter city or zip code to find routes
Search
Popular
Routes
Home
User
Settings