

The Beach Lover App

REQUIREMENTS DOCUMENT

Prepared for: The Iron Yard
Front-End Engineering Final Project
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Charleston, SC

Meet the Beach Lover App

ELEVATOR PITCH

Helps beach goers plan their perfect beach outing by presenting data on nearby beaches including beach characteristics and features, alongside weather, wind, wave and tide conditions and forecast information.

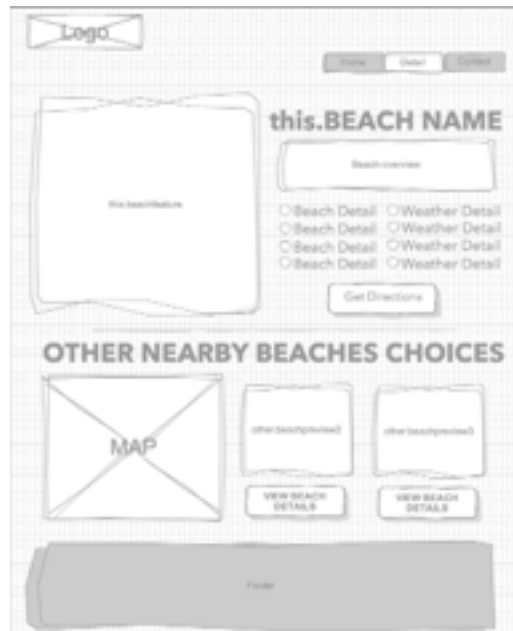
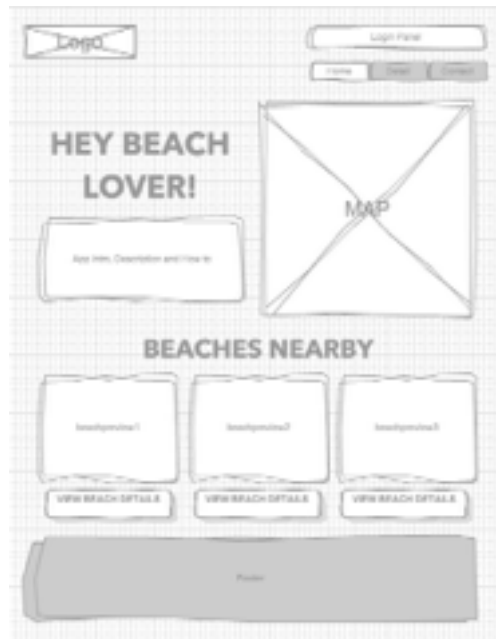
FEATURES SUMMARY

- Find nearby beaches at a glance using a map view
- Identify which beaches have desirable weather & water conditions through map icons
- Review detailed beach characteristics in list format with text
- Get walking, driving, or transit directions to the beach of your choice

TECHNOLOGY

- Javascript Application
 - MapBox.js
 - Mapbox API for webservice (generating geoCoded directions)
 - MapBox Streets
 - TileMill (map design and customization)
 - World Weather Free Marine API: <https://developer.worldweatheronline.com/>
 - HTML 5 geolocation
 - Firebase
 - Angular.js
 - jQuery
 - HTML/CSS
 - Twitter Bootstrap
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WIREFRAMES



MOBILE



FUNCTIONAL REQUIREMENTS/FEATURES **MVP

FEATURE: IDENTIFY AND DISPLAY NEARBY BEACHES

Value Statement

As a user, I want to know which beaches are nearby, so that I can view select a beach relevant to my current location.

Assumptions:

- Assumes that users are utilizing a device that allows geolocation.
- Assumes that user prefers not to travel further than 100 miles to visit the beach.

Acceptance:

User's location is geoCoded and revealed on the map along with all beaches within 100 miles of user's current location.

Notes:

May need to consider option for if they do not allow the browser to geolocate them or if they want to use the app to plan a beach trip outside of the 50 mile search radius.

FEATURE: PROVIDES BEACH FEATURES & CHARACTERISTICS

Value Statement:

As a user, I need to see details about a beach so that I can choose if it fits my criteria.

Assumptions:

Assumes that all beach data is available and accurate.

Acceptance:

Users will be able to view characteristics about each beach on their device

Notes:

Initially data will come from a seeded list of Charleston beaches with their details.

- Name of the Beach
 - Address
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- Distance from user
 - Parking availability and location
 - Features: ex. Showers availability and location
 - Lifeguards on duty and emergency contact info
 - Beach rules: dog rules, alcohol
 - Handicap access
 - Find your closest beach using list, map, or search tools
 - Identify at a glance which beaches have safe weather and water conditions
 - Get walking, driving, or transit directions to the beach of your choice

FEATURE: INTEGRATION WITH WEATHER DATA

Value Statement:

As a user, I want to know the weather forecast and water conditions at the beach so that I can decide if the weather and water conditions are desirable and safe for a visit to the beach.

Assumptions:

- Assumes that weather data is available for that location. Assumes that the source chosen for the weather data is accurate. Assumes that the weather-station chosen for that location is close enough to be relevant.

Acceptance:

User can view weather information corresponding with the beach they are reviewing.

Notes:

Ideally I would like to provide the following geoCoded weather and tide data:

- Air temperature
- Water temperature
- Wind: average and gusts
- UV index
- Tide predictions
- Wave height
- Rip current forecast

Alternatively I will try Forecast API : <https://developer.forecast.io/docs/v2> or one available through apogee.

FEATURE: GENERATES DIRECTIONS FROM THE USER'S CURRENT LOCATION TO SELECTED NEARBY BEACH

Value Statement:

As a user, I want to know how to get to the beach, so that I can find it easily.

Assumptions:

- Assumes user's current location is relevant to where they will depart their trip.
- Assumes that the directions provided by Mapbox web services is accurate.

Acceptance:

When user clicks on the get directions button, they are redirected to a view which displays step by step directions from their current location to the selected beach.

Notes:

FEATURE: RESPONSIVE SITE

Value Statement:

As a user, I want information to display in an organized manner on both when accessed on a desktop/laptop or mobile device.

Assumptions:

Acceptance:

Notes:

Utilizing Twitter Bootstrap for this purpose which is a mobile first platform.

FEATURE:

Value Statement:

Assumptions:

Acceptance:

Notes:

ROAD MAP V1.0 AND BEYOND

Features to potentially:

- Display user generated geoCoded photos
 - Integrate traffic data
 - Reviews added by users
 - Integrate lightning data. Perhaps using the Weatherbug Spark API:
 - Integration of beach Webcams :
 - Deployment using Firebase (** not required for MVP but desired)
 - Social integration to share reviews, comments, messages, alerts and photos
 - Firebase SimpleLogin** (login not required for use, only to add and save content)
 - Bookmark beaches for easy access
 - Invite your friends to join you at the beach using Facebook, Twitter, email and SMS text messaging
 - FAQ
 - Legalese
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