

# WDD330 – Final Project – Marina Info Site

## Overview:

### Problem Statement:

For coastal boaters, finding marina information is critical. It can be difficult to find a single source of truth for everything needed. Such as locations, amenities, and more importantly what to expect when coming in.

### Why are we doing this?

The goal is to generate a site that pulls in the information that would be helpful to a cruiser boat who is coastal hopping. In this situation, cruisers aren't necessarily tied to a specific destination but one that is within range, has the amenities they need and will be a safe passage. This site will pull in the marina and harbor information given a location search, providing options to select and gather details for each location. It will also provide current and forecasted wind and weather patterns so they know what to expect as they come in or depart. Helping them make safe passage making decisions.

## Audience:

Audience is primarily for Maritime Sailors and Boaters. Those that would be interested in ports, marinas, harbors and safe inlets as well as the ocean conditions entering and exiting these locations.

## Functions:

### LocationSearch:

Coordinate or City Name search with ability to set radius of the search. This will reach pull from the Marinas api and return all marinas and harbors available to the public to dock and utilize services. This will call the `CreateMapPins(marinaList)`.

### CreateMapPins:

This will take the Search Results and place a pin for each location on the map. For each pin, it will call the `CreateMapPinNameCards(marinaName)`

### CreateMapPinNameCards:

This will add a pop-up with Name of the marinas when user clicks on the Map Pins. Also make the name clickable to Open a `marina-details.html` for that marina. Possibly handling by passing in a url query.

### RenderDetailsPage:

On load of `marina-details.html`, this will extract all the available details and render them on the Details Page. This will also call the `RenderWindyMap(location, options)` Function. Options for rendering needs to includes images (carousel?), links to marina page, features, etc.

### RenderWindyMap:

Given the location input passed in from `PopulateDetailsPopulate`, this function will generate a map showing current and future wind conditions for that area. Possible options to customize the map.

SaveFavoriteLocation:

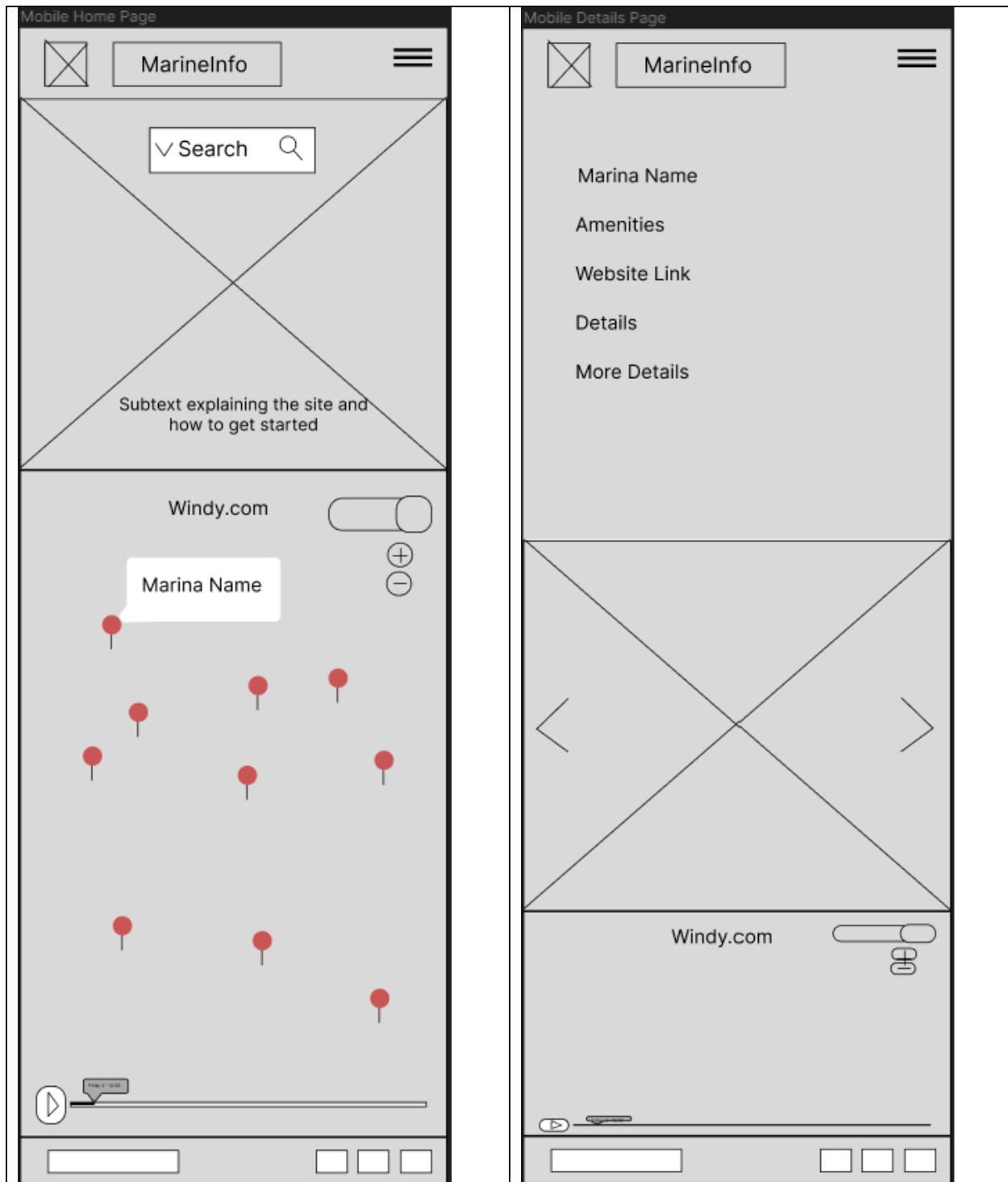
Html button calls this function. Passes in the current searched location into localStorage

RenderFavoriteLocation:

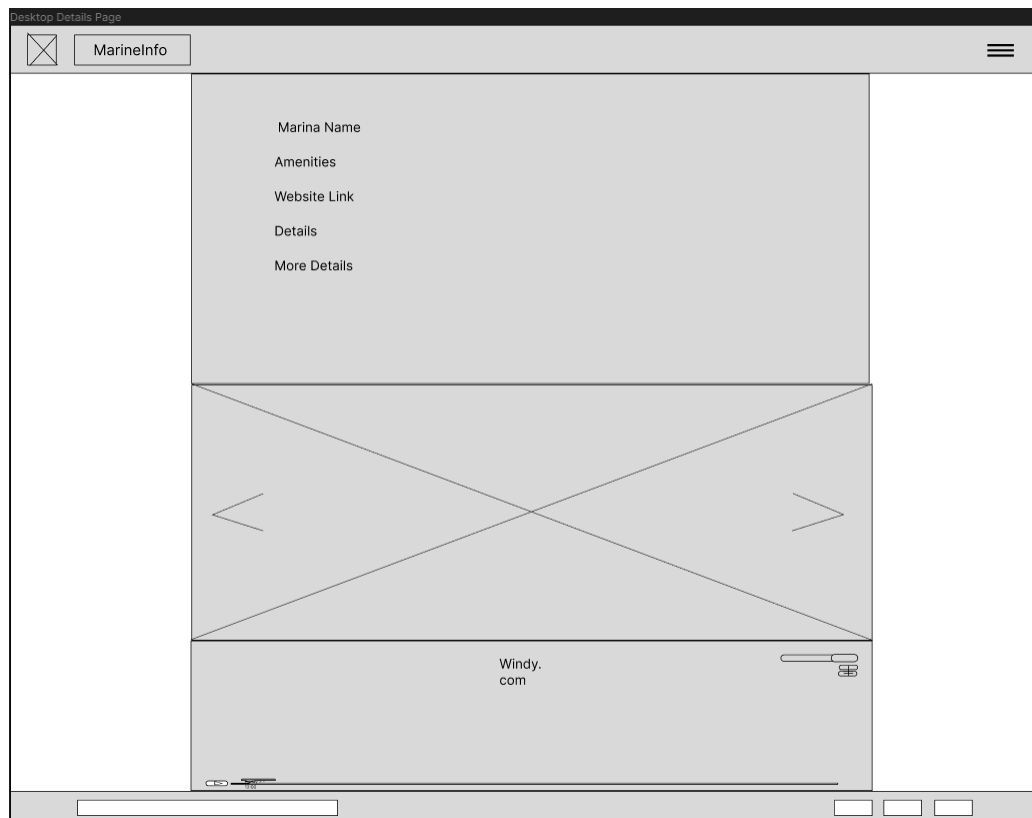
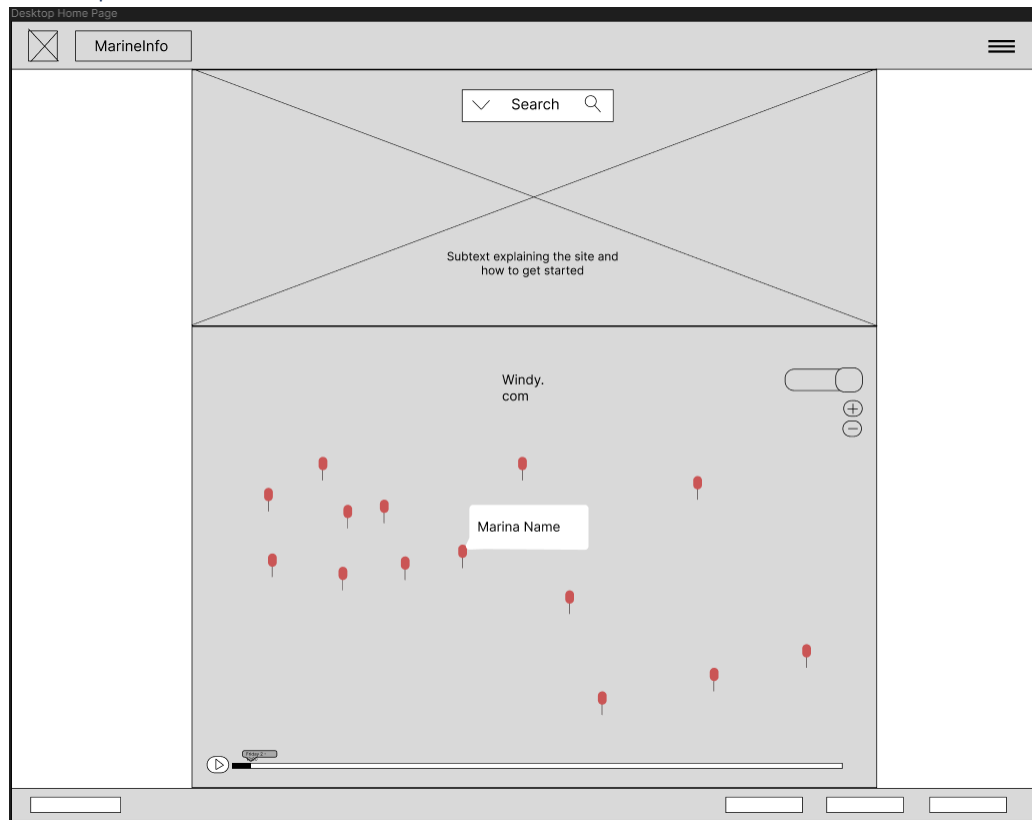
Html button to recall the localStorage savedFavorites and render on the page.

## Wireframes:

### Mobile Wireframes



## Desktop Wireframes



## Data Sources:

Marinas.com API

<https://marinas.com/developers> Pulls a list of all marinas, harbors, inlets, etc within the marinas.com database. This will also provide full details of the marinas including details such as images, features, websites, etc.

Windy API

<https://api.windy.com/> Wind map api. Given a location, will generate a map using leaflet plugins. Leaflet provides a lot of flexibility for things like adding overlays and interface adjustments.

localStorage

localStorage may be utilized to track things like user preferences/options, location search, and save favorite locations.

## Modules

WindyMap Module

MarinaDetails Module

MarinaSearch Module

Favorites Module

## Styling:

Colors & Typography

```
/* FONTS */
--font-sans: "Poppins", Helvetica, Sans-Serif;
--font-clean: system-ui, -apple-system, BlinkMacSystemFont, 'Segoe UI', Roboto, Oxygen, Ubuntu, Cantarell, 'Open Sans', 'Helvetica Neue', sans-serif;
/* FONT-SIZES */
--font-base: 18px;
--small-font: 0.8em;
--large-font: 1.2em;
/* COLORS */
--primary-color: #02010a;
--secondary-color: #052C6F;
--highlight-color: #FF9B42;
--light-color: #EBF0F0;
}
```

## Schedule:

### Week1

- Rough draft of index.html pages for main and marina-details pages
  - Headers/footers/sections in place following wireframe structure
- Colors and basic styling implemented
- Rough API pulls built to extract basic details. Confirm proof of concept on data pulls.

### Week2

- Build Home html page
  - Search functionality
    - Enter Coordinate or City
    - Return marinaList from api
  - Map with pinned search results
    - Iterate through returned marinaList from API with corresponding marinaCoord
    - Place pin at each location representing each marinaName
    - Build pop-up card to display marinaName when user clicks pin.
      - Click on Name or add 'Open Details' button on card.
      - Send to marinaDetails page using query
  - Option to Save location to favorites as locationFavorites
    - Button to save as favorite.
  - Open from saved favorites
    - Drop down on search bar to retrieve locationFavorites

### Week3

- Build up marina-details html page
  - Fully rendered details for the given marinaName selected
    - Name, amenities, features, website
    - Images in a carousel if available.
    - Reviews if available.
    - etc
  - Windy map fully functional with custom views
    - Pin at marina location
    - Current and forecast wind
- Finalize details
  - Animations, hover effects
  - Polish up pages and feature.
  - Clean and final draft

## Trello:

<https://trello.com/b/q7JsAkXf/marina-info>