

HandleBars

by Team Handlebars - Pd 9

Roster: Jeff Lin (PM), Kenneth Chin, Calvin Chu, Henry Liu

Website Purpose:

Return close bike rental spots, a map, and the weather of a searched location using the CityBikes, MapQuest Open Geocoding, and MetaWeather APIs. We plan to use Bootstrap to build our website

Tasks:

- Processing search terms to plug into API URLs
- Handling invalid search terms
- Displaying weather information about a location
- Displaying bike rental spots
- Displaying map

APIs:

[City Bike](#) ([Documentation](#))

[MapQuest Open Geocoding](#)

- Jeff's API Key: GiP6vYcbAdnVUtnHGJwYdvAdAxupOahM

[MetaWeather](#)

#1: Site Map

Features:

Search Handling

- Location information is taken in by MapQuest and map is returned of location
- Take coordinates from MapQuest API and plug into MetaWeather API
- MetaWeather API returns "woeid" to search for location weather based on city
- Take coordinates from MapQuest API and plug into CityBikes API to return close bike spots

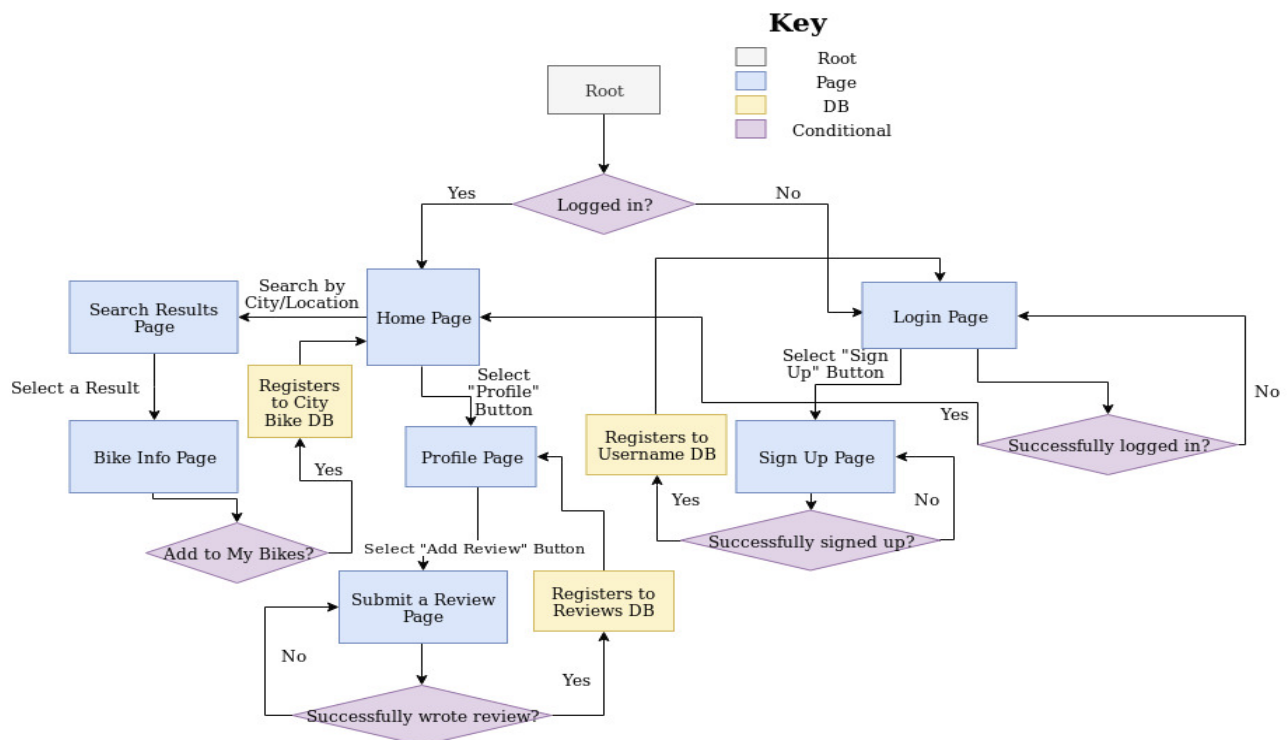
(Direct user interactions on the site)

- ❖ Login/Registration: Each user will need to make an account/log in to post reviews or comments and save bike spots.
- ❖ Search Bar: The user can search for CityBike info based on a location. There are options to view the weather or a picture of the location (if available) too. This data will be accessed through APIs/current information in the databases.
- ❖ Write a review: Each user can write a review for a given company/location. They can give it a vote out of 5 and write comments. The review will be stored in the reviews database.
- ❖ Welcome Page: The main page that is presented when a user logs in. This page will present the top voted locations based on the opinions of other users.

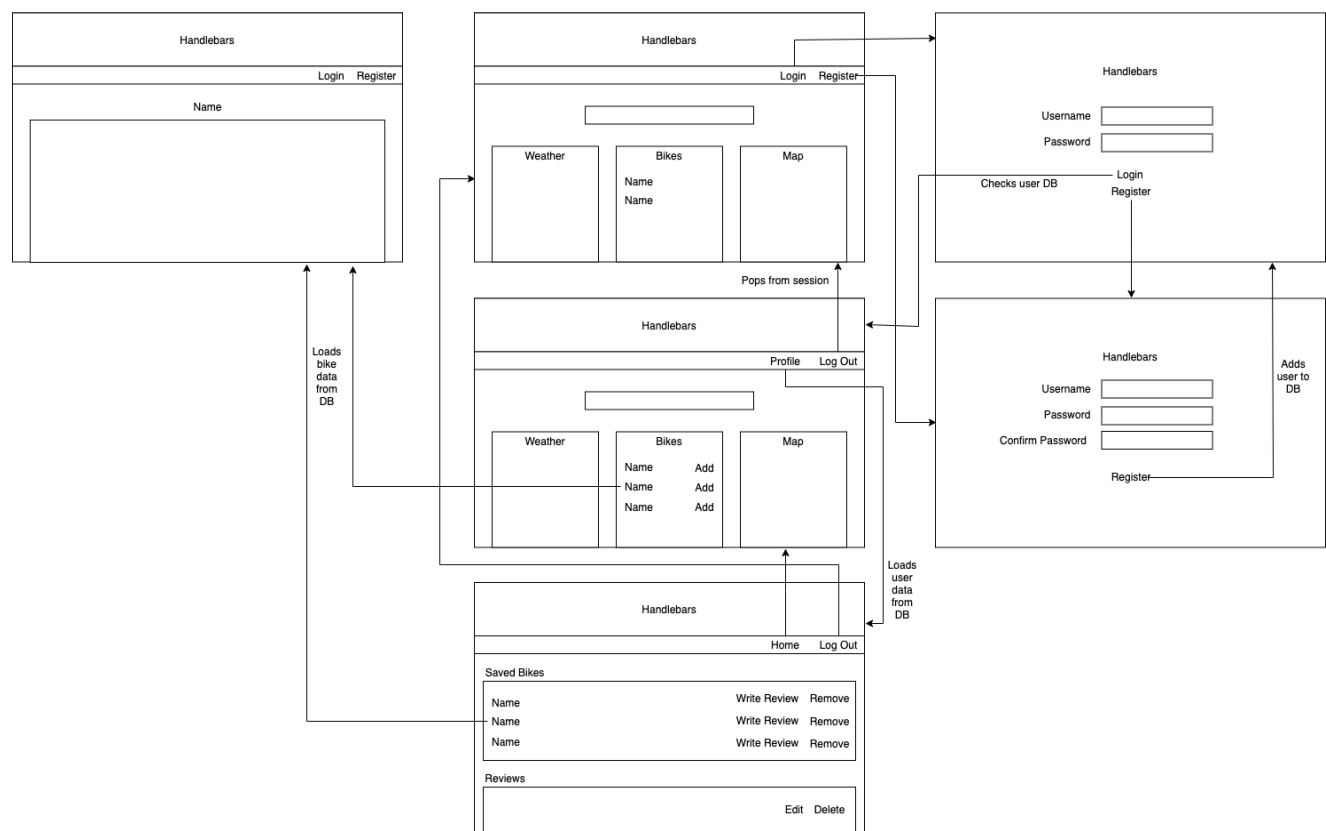
Site Pages:

Parent page that contains navbar - buttons vary depending on login status/page

- Home Page
 - Contains the search bar
 - Large jumbotron heading
 - Search Results:
 - Weather will return weather from API (has to be most recent)
 - Bike spots will return spots from database and API (bike availability has to be most recent)
 - Map will return an image from API
- Login Page
 - Credentials fields - checks username and password exists/matches
 - Redirects back to the home page
 - Register button - links to the registration page
- Registration Page
 - Credentials fields - asks for username and matching passwords
 - Redirects back to login page
- User Page
 - Saved bike spots - profile of the bike spot will be loaded
 - Filters through SAVEDBIKES database to find saved spots
 - Consistent details will be loaded from the database
 - Bike availability will be pulled from API
 - Reviews - title, rating, and text of review
 - Filters through REVIEWS database to find saved spots
- Redirect page



#2: Component Map



#3: Database Layout Diagram

USER

username TEXT	password INTEGER
hliu00	1234567
jlin02	abcdefg

SAVEDBIKES

username TEXT	bikeNumber
hliu00	0
jlin02	0

REVIEWS

username TEXT	bikeID	location TEXT	rating INTEGER	Content BLOB
hliu00	velobike-moscow	Moscow	5	The staff was very friendly. The price was reasonable. I will definitely come back.
jlin02	velobike-moscow	Moscow	2	The pay machines don't work. Lack of service. Too much traffic, not an enjoyable place to rent a bike.

BIKES

bikeID	City	Country	Name	latitude	longitude
velobike-moscow	Moscow	RU	Velobike	55.75	37.616667
bicyklen	Copenhagen	DK	Bycyklen	55.673582	12.564984

- using the city inputted by the user, the id can be used to access the City Bike API to request the specific latitude and longitude.

Minimum Viable Product

- Full implementation of API
- Working search bar that can handle all types of entries

Extra Features

- Users and profiles
- Saved bike location on accounts
- User reviews

Work Division

- Jeff Lin (PM):
 - Front end design, search bar, and API connections
- Kenneth Chin
 - Bike spot reviews and review display and ratings
- Calvin Chu
 - Front end design, search bar, and API connections
- Henry Liu
 - Login and user sessions and databases