Project Plan

Milestones:
- **Proof of Concept (11/18)**
  - Given a start and end location, our app will be able to generate the trip between these locations, such that the trip is broken down into walking/biking routes and contains hub stops in between.
  - The app will be able to display this trip in a map UI, with an indication of the biking/walking routes.
  - The app will be able to provide a rough time estimate for this trip.
  - Just show the trip concept works, no account concept yet, and no directions given yet for the trip.
- **Minimum Viable Product (12/2, 12/4)**
  - Complete trip from start to end with hub stops in between on a map UI
  - Add directions that break trips down into its specific routes and stops
  - Split time estimates into time estimates for each route and stop
  - Account concept with sign-in, username, password, and ability to save favorite trips
  - Show the saved trips of any user and show that we can start a trip by selecting a saved trip, and not have to enter the start and end locations again
  - Incorporate feedback from POC presentation. These are our reach goals for MVP:
    - Add description of service on homepage
    - Add exact address to address form
- **Finished Product (12/9)**
  - Allow users to enter multiple stops (between start and end locations) for a single trip, and show a trip with multiple stops on the map UI
  - Potentially allow users to track their mileage traveled (and calculate other fitness statistics) by allowing starts to start and "complete" trips by pressing on a button indicating that they've arrived at their

destination. Feature depends on usertesting / feedback. [Scraped: not really useful or within the scope of our original goals]
- ○ Complete UI implemented (add CSS,
- ○ Incorporate feedback from previous presentations.
    - ■ Show more info about bike stations - how many bikes are left, space, etc.
        - ● Have bike locations annotated on the map
    - ■ Autocomplete feature on 'From' and 'To' fields [Scraped: hard with limited API calls]
    - ■ Having a feature where users can send trip info to mobile (email, text)

Implementation & Tasks:

Manageable Chunks
Expect 10-20 such tasks
Each should have assignee, deadline

Deadline	Task	Assignee
11/12	Research Google API to figure out what data we have at our disposal	Raveen
11/13	Get the Blue Bike hub locations from the Blue Bike API	Steven
11/14	Write an algorithm to find the nearest blue bike hub to a location.	Yanni
11/15	Make the UI component to enter start/end locations, together with the map by embedding Google Maps UI into a web page	Robert
11/16	Find and display best routes for getting through the trip.	Steven
11/17	Test to make sure trips are generated for different start and end locations	Yanni
11/18	Complete Proof of Concept	Everyone
11/19 or 11/21 (feedback ready)	Meet to discuss how to incorporate feedback from POC presentation	Everyone
11/23	Add API call to retrieve directions between two locations from Google and display in UI	Raveen

11/23	Split time estimate into different estimates for each route and stop	Steven
11/26	Add Account feature and provide options to create an account, sign-in, sign-out, and delete an account. Accounts can be created with username and password.	Robert
11/26	Add features to save a trip, delete a trip, display these saved trips on a page (only if users are signed in)	Yanni
11/26	Add service description to homepage, and add the exact address to the form	Everyone
11/26	Show more info about bike stations on map, and allow users to send trips to email	Everyone
11/28	Test to make sure account works, users can save and show saved trips, users can delete saved trips, and directions are shown for any trip.	Robert
12/2 or 12/4	Complete MVP	Everyone
12/3 or 12/5 (feedback pending)	Discuss and incorporate feedback received about MVP	Everyone
12/4	Add multiple stops features (e.g. 1 or more stops between start and end locations)	Yanni
12/5	Allow users to track mileage traveled (walking / biking miles) to generate fitness statistics	Raveen
12/6	Work on UI by including CSS and making things look good!	Robert
12/7	Test to make sure complete product is polished by testing multiple stops feature, fitness statistics, and ensure website is visually appealing™	Steven
12/9	Complete Final Project!	Everyone

What if Something Goes Wrong?

If something goes wrong, we will discuss together as a group to remove and change problematic features as needed to ensure the success of our project. For instance, if it turns out our fitness statistics feature isn't working as intended (or if user feedback says that it is unnecessary), then we will either remove the feature completely from our final product or change it based on users' suggestions (if any). If it comes to removing a feature, we will first look into features that comes after the MVP, and then into features for the MVP and Proof of Concept. Our goal is to focus completely on our essential features and make sure our project is feature-complete.