DOES**NOT**commute

BY   **DNC**

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Delegation

Winston: Dark Sky API, Back-Front Liason
Zicheng: (PM): Google APIs, Flask App
Brian: Google APIs, Javascript help, MTA API
Will: Front End (Bootstrap)

Abstract: Using a location API, finds user location. User provides location to which they want to go. User gives them a time they want to arrive at that location. Then our website generates a way to get there and provides an estimated ETA, with reasons based on train and bus delays, traffic (?), minute-to-minute weather.

Site Map:

    Home (Single Page)
    About (Mission statement, about developer, goals, etc.)
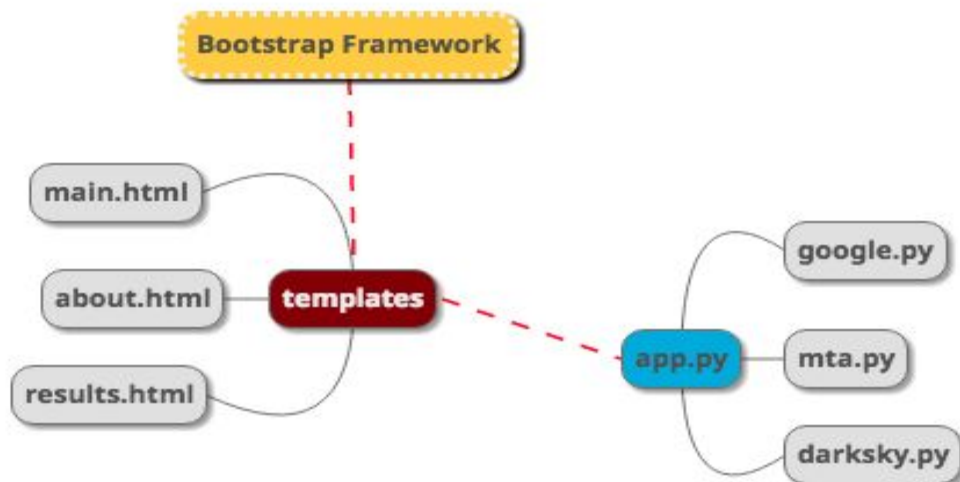   Result Page (shows results, hidden in nav)
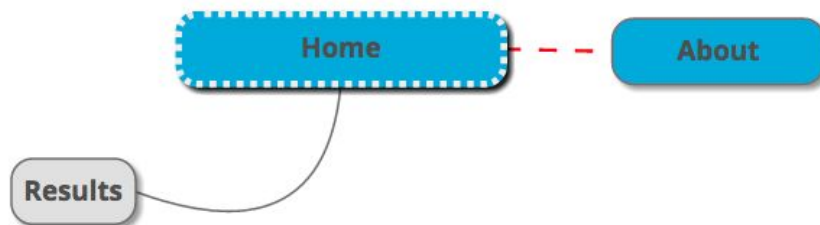
APIs:

Dark Sky API
Google Maps (Google Maps Distance Matrix API, Google Maps Geolocation API,
Google Maps Directions API, Google Maps Geocoding API)
MTA (Subway Times, Bus Times)

Component Map:

Component Descriptions:
- App.py
  - Contains flask app
  - Three Routes (perhaps two if we condense):
    - Home
    - About
    - Results
- Google.py
  - Handles Distance Matrix, Geolocation, Directions, and Geocoding APIs
  - Geocoding APIs required to pass geo-location coordinates to DarkSky
  - Distance Matrix handles distance and helps with time estimates
  - Geolocation provides location information based on current location
  - Directions helps map routes to location
- Mta.py
  - Handles pulling delay info (from subways and busses) from the MTA

- ○ Returns necessary info based on path selected, trains/buses required on path, and weather
- Darksky.py
  - ○ Gives up to date (minute-to-minute) weather info based on current location and goal location.
  - ○ Also used to provide information about weather along the way, and weather within the given timeframe of travel.
  - ○ Uses information from Geocoding/Geolocation Google API for location info
- Templates
  - ○ Main.html
  - ○ About.html
  - ○ results.html

Features:

Location entry (or based on geolocation)

Weather info (based on location)

Evaluation of ETA (whether you can make it on time)

Time you want to arrive input

Reminders based on weather, delays, etc.

Etc…

Application Layout:
1. Where do you want to go? (textbox input)
2. Where are you now? (textbox input, or option to use geolocation)
3. How do you want to get there? (checkboxes: car, bus/subway, bike, walk)
4. When do you want to get there? (Not necessary)

Possible Future Features (room for future development):
1. Ability for user to save frequent routes (cookies)
2. Login and accounts (if we choose)
3. Print output on same page as input pages (one page)
4. Bikes include CitiBIke API

Dev Schedule:
1. Friday - December 2

- Set up devlog
- Set up skeleton files

2. Monday - December 5
    - Basic HTML templates (Will, Winston)
    - API calls and communications from utility files
        - Darksky API (Winston)
        - Google APIs (Brian, Zicheng)
        - MTA (Brian)
    - Basic routing in Flask app (Zicheng)