Sprint #3 Plan 1

EasyRoute

Revision #1

May 8, 2024

Goal: Add the ability to customize the path based on accessibility needs, add search bar

Task List:

User story 1: As a user, I want to customize my route to avoid stairs. [10]

- Task 1: Add user functionality (frontend) where they can choose to avoid stairs for their route. (3 hrs)
- Task 2: Customize API call to avoid stairs within our code based on what the user chose. (2 hrs)

Total for user story 1: 5 hrs

User story 2: As a user, I want to customize my route to avoid hills. [10]

- Task 1: Add user functionality (frontend) where they can choose to avoid hills for their route. (3 hrs)
- Task 2: Customize API call to return elevation (steepness?) values in API response. (1 hr)
- Task 3: Add functionality that shows the elevation value to the user and recommends calling a van/car if appropriate. (3 hrs)

Total for user story 2: 7 hrs

User story 3: As a user, I need to be able to see where an elevator is to get to an upper level. [3]

- Task 1: Find the openstreetmap map that contains the elevator icons/locations for UCSC campus. (2 hrs)
- Task 2: Add the elevator data to our openstreet basemap then extract data (geoJSON) using overpass turbo. (2 hrs)
- Task 3: Add this geoJSON data to our code, ensure elevator locations show up on map. (3 hrs)

Total for user story 3: 7 hrs

User story 4: As a user, I want to search for a destination on the map. [8]

- Task 1: Adding a search bar to the map. (Look into both MUI and just basic HTML) (1 hr)
- Task 2: Type in your current location and your end location to calculate the route. (3 hrs)

Total for user story 4: 4 hr

User story 5: As a user, I want to be able to choose whether I'm walking, driving, or using any other travel mode.

- Task 1: Add frontend for user to choose travel mode before calculating route. (3 hrs)
- Task 2: Add code that takes in user's chosen travel mode and edit API call profile accordingly. (3 hrs)

Total for user story 5: 6 hrs

User story 6: As a user, I want an informative map. [4]

- Task 1: Add a legend for the buildings and highways. [2hr]
- Task 2: Find a way to get elevation data to the map. [2hr]
- Task 3: Add McHenry Library and Hahn Student Services. (2hrs)
- Task 4: Make building names visible. (2 hrs)
- Infrastructure: Improve performance of the map. [2hr]

Total for user story 6: 10 hrs

User story 7: As a user, I want to see turn-by-turn directions for my route. [5]

- Task 1: Parse API JSON response to extract directions. (1 hr)
- Task 2: Add frontend to display the turn-by-turn directions to users. (3 hrs)

Total for user story 7: 3 hrs

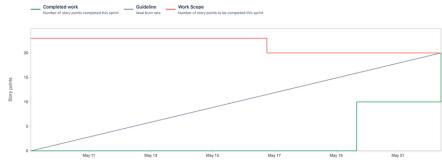**Team Roles:**

- Megan: Product owner, developer

- Adora: developer
- Brandon: developer
- Hazel: scrum master, developer

Initial Task Assignment:

- Megan: User story 7
- Adora: create new GitHub repo for project and share it with team members; User story 4
- Brandon: User story 6
- Hazel: User story 2

Burn Up Chart