Contributions

Group: Railroad Travel Data in China
Group Members: Tongze Wang(Project Owner), Zhaoheng Chen, Howard Ho Wai Ng
Individual Contributions:

Tongze Wang:

- Scraped all train data from the official website of China Railway, including train number, departure time, arrival time, time needed, price.
- Cleaned and wrangled the collected data
- Store the cleaned data into one single json file, so that it can be used by the webpage.
- Build the beta version of the train transfer searching algorithm.

Zhaoheng Chen:

- Plot all the stations into the map with the coordinate dataset
- Implement the algorithm to find all trains that fit within the user's budget and travel time from departure station to arrival station
- Fix the bugs like zooming, color changes, "empty" station and negative price, maximum travel time and budget ,etc.
- Visualization
    - Generate a table to show the user which trains they can take from departure station to arrival station.
    - Create the floating windows, so that user can enter their budget and travel time.
    - Connect the departure station and arrival station with an animation path to show the possible stop stations
    - Design the UI of the maps.

Howard Ng:

- Scraped and geocoded all the coordinate for every train station.
- Built the web page with react and published it to github page with 'gh-pages' package
- Implemented the algorithm to find all stations that fit within the user's budget and travel time
- Visualization
    - Updating the map with all the reachable stations
    - Generate a link to the webpage where the user can buy the ticket from the table.
    - Map reset

Github:https://github.com/howardng940990575/CSE184-Final-Project-Railroad-Travel-React

Webpage:https://howardng940990575.github.io/CSE184-Final-Project-Railroad-Travel-React/