## UI Design of the Project (Group 17)

 Interactive Map: Occupying the center of the web page, the map visually presents different areas of Manhattan.

## • Geographic Range:

- 1. Display only Manhattan.
- 2. Priority: Finish the neighborhood level model, if time allows: Extend to the prediction of different building classifications within the neighborhood.
- Map Form: (Choose one)
  - 1. Present as a heat map, showing the hot spots of taxi pick-ups and drop-offs.
  - 2. Present as a scatter map with 29 different colored markers. The colors represent the frequency of taxi pick-ups and drop-offs, with red for high, yellow for medium, and green for low frequencies. The style of the marker can draw from Google Maps' pins.

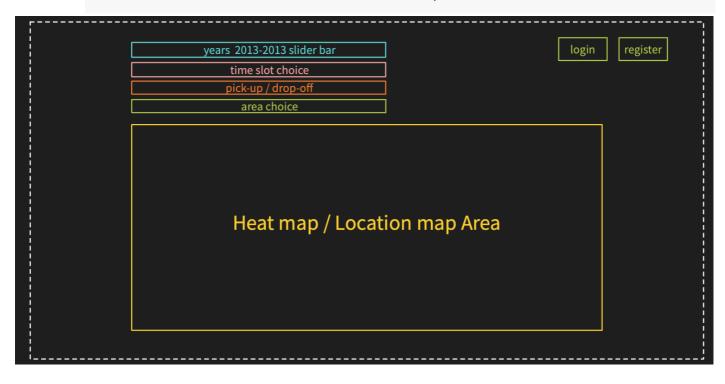




2. Filtering Section: Positioned above the interactive map, users can use this section to

customize the map view, specifically as follows:

- Time Filter: Set a slider bar where users can slide to select different historical times, for example from 2015 to 2019.
- Vehicle Activity Choice: Users can choose to view either taxi pick-up or drop-off points.
- Time Slot Choice: Users can select to view data within specific time slots, such as from 19:00 to 21:00.
- Area Choice: Users can select to view data of specific areas.



- 3. Details Window: When users click on a certain point on the map, a details window will slide out. The content in the window includes:
  - Area Name: At the top of the window, display the name of the selected area so users
    can clearly know which area's data they are viewing.
  - Past Rent Fluctuations: Below the area name, present a line graph showing the rent fluctuations over the past 5 to 10 years. This allows users to clearly see the trend of rent changes, which can aid in their investment decisions.
  - Predicted Housing Prices: Below the line graph, display predictions for future housing prices. This information can help users understand possible future price trends, providing valuable reference for their investment decisions.
  - on the close button in the upper right corner of the window, or by clicking on another point on the map. This design makes users' operations smoother, as they can view the data of other areas without having to return to the main interface.

- 4. User Registration/Login Feature (Lower Priority Feature): Positioned in the upper right corner of the page, users can click the button to open a registration/login window.
- User Customization Dashboard (Lower Priority Feature): Logged-in users can access a customization dashboard for more advanced personal settings.
- 6. Page Style: Adopt a dark tone, and select a dark and minimalist illustration of New York City as the background image. The overall style is clean and professional.