

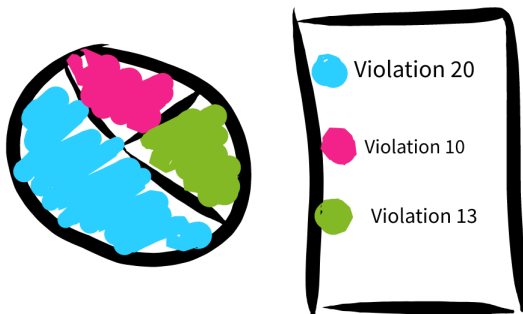
Sprint 4 - Artifact

Features (analytics to implement):

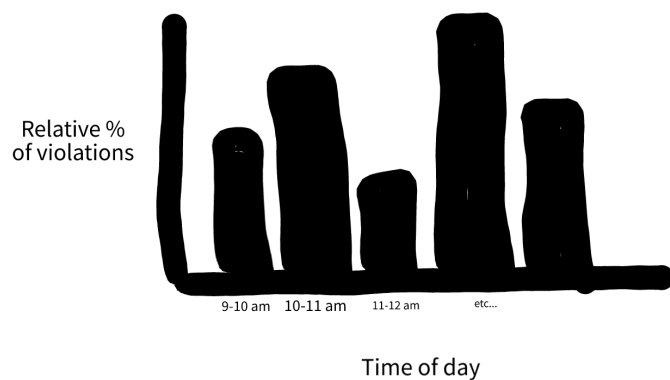
- Most common types of violations
- Car brands that get a violation the most
- Frequencies of violations given based on time of day

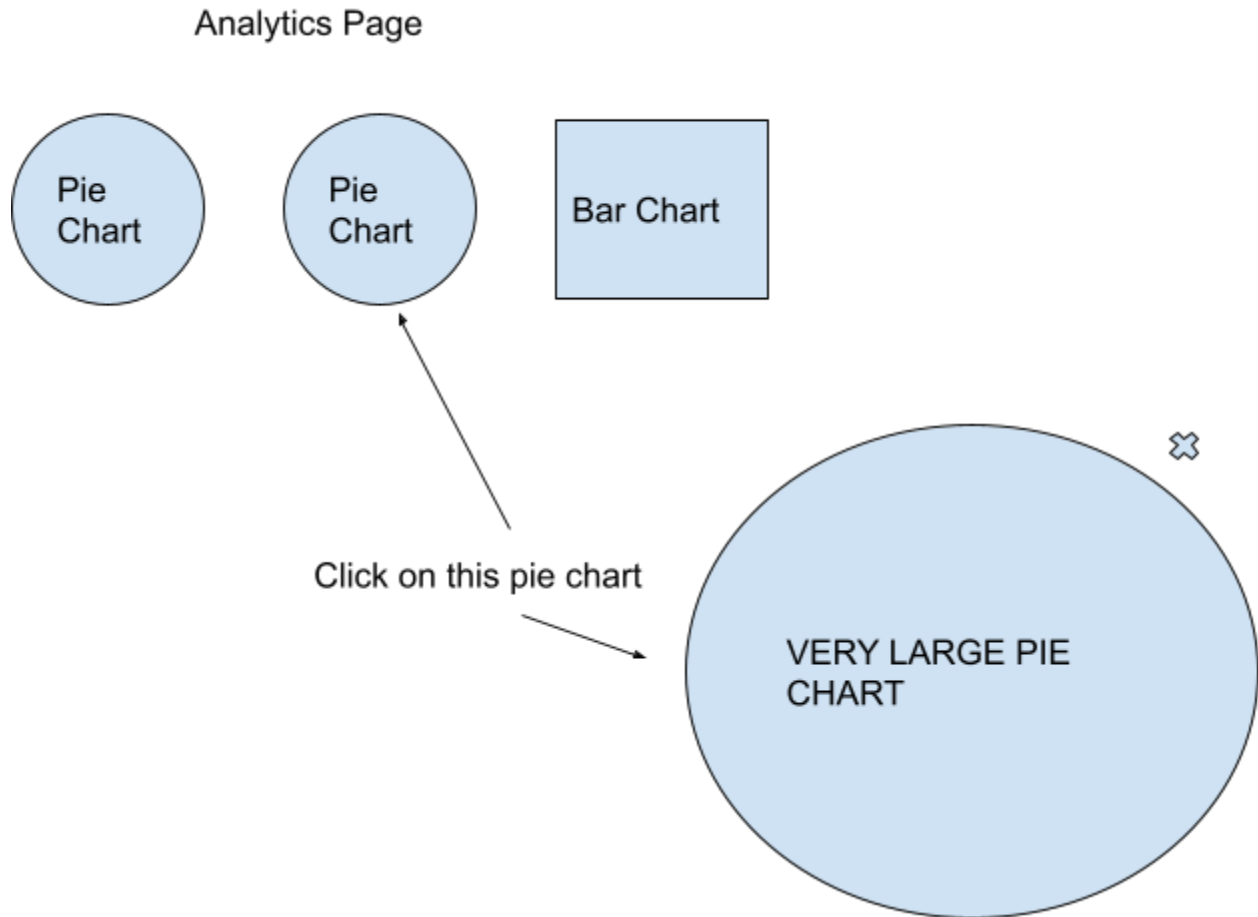
GUI Design:

- Most common types of violations
 - Pie chart =]
 - Backend returns list of [Violation code, # occurrences, % of total violations]
- Car brands that get a violation the most
 - Pie chart =]
 - Backend returns list of [Car brand, # occurrences, %]



- Frequencies of violations given based on time of day
 - Bar chart =]





TEST CASES:

- Most common types of violations
 - As a user, I click on analytics tab in hamburger menu
 - Correct output: Analytics page shows up on screen with the three different analytics shown small on the screen
 - As a user, I click on the most common types of violation pie chart
 - Correct output: Most common types of violation pie chart is enlarged and shows on screen, with a little x in the upper right hand corner
 - As a user, I click on the x in the upper right hand corner
 - Correct output: Analytics page is back with the 3 analytics small on the screen
- Car brands that get a violation the most
 - As a user, I click on analytics tab in hamburger menu
 - Correct output: Analytics page shows up on screen with the three different analytics shown small on the screen
 - As a user, I click on the car brands that get a violation the most pie chart

- Correct output: Car brands that get a violation the most pie chart is enlarged and shows on screen, with a little x in the upper right hand corner
 - As a user, I click on the x in the upper right hand corner
 - Correct output: Analytics page is back with the 3 analytics small on the screen
- Frequencies of violations given based on time of day
 - As a user, I click on analytics tab in hamburger menu
 - Correct output: Analytics page shows up on screen with the three different analytics shown small on the screen
 - As a user, I click on the frequencies of violations given based on time of day bar chart
 - Correct output: Frequencies of violations given based on time of day bar chart is enlarged and shows on screen, with a little x in the upper right hand corner
 - As a user, I click on the x in the upper right hand corner
 - Correct output: Analytics page is back with the 3 analytics small on the screen

Done list of last sprint:

- Backend program to overwrite existing CSV
 - [finished by Justin Pham and verified by everyone]
- Optimized search on frontend to display search results correctly
 - [finished by Diane Shan and verified by everyone]
- Optimize search and parse function
 - [finished by Justin Pham and Ethan Bayer and Heng Tan and verified by everyone]
- Implement update/insert/delete in frontend
 - [finished by Jason Lin and Diane Shan and verified by everyone]
- Reformatted data table to have more fields and display all necessary information
 - [finished by Diane Shan and verified by everyone]
- Backend method to update/insert/delete
 - [finished by Justin Pham and Heng Tan and verified by everyone]

ToDo Tasklist for this sprint:

- Implement pie chart and bar chart in frontend
 - Acceptance criteria: pie chart and bar chart displays correct information and is easily readable
- Add analytics page to frontend and hamburger menu

- Acceptance criteria: Clicking on analytics in the hamburger menu leads to the analytics page where the three analytics are shown on the page in small form
- Implement enlargement of selected analytic
 - Acceptance criteria: Clicking on certain analytic makes it become larger with a little x in the upper right hand corner
- Implement the Analytics feature for most common types of Violations
 - Acceptance criteria: Display a pie chart with the various violation codes and their percentages based on the overall total of violations in the dataset.
- Implement the Analytics feature for most common Car Brands to receive violations
 - Acceptance criteria: Display a pie chart with all the Car brands in the data set based on their percentage of how many violations they received from the total number of violations.
- Implement the Analytics feature for the violations given at a time of day
 - Acceptance criteria: Display a bar graph where the x-axis is the time of the day separated in hours (including a slot for unknown time) and the y-axis is the percentage of violations received from the total per dataset.