#### Features:

#### **Check MARTA Arrival Times**

User can view the closest next arriving trains.

User can subscribe to notifications for a particular train line for both arrivals and delays.

# **GSU Bus System Tracking**

User can view and track real-time locations of each bus line i.e. (Red line, Blue line, etc.) User can subscribe to notifications for when a selected bus line is close to arrival.

### GSU Parking Availability check

User can view availability of spots for each Parking Deck.

User can subscribe to notifications for when a deck becomes full.

### Real-Time Traffic Updates

User can view real-time traffic conditions, including delays, congestion, and accidents, displayed visually on a map or in list format.

## Weather Information

Notifications of weather conditions resulting in MARTA delays or increased traffic.

# Real-time database updates:

Our system must be able to update and retrieve real-time traffic, transit, parking, and weather information; this update and retrieval from external APIs such as Marta and Google Maps must happen with a delay no longer than a couple seconds (1-5 sec).

## Concurrent Users scalability:

Our software system is intended to be used by the GSU student body and must therefore be able to handle tens of thousands of users all accessing real-time commute data and receiving notifications all at the same time without any significant degradation in performance.