**RED EYE MANAGEMENT SYSTEM**

**“There are no big problems, there are just a lot of little problems”**



**Overview:**

In this project we will create a centralized database for “RedEye”, Northeastern University’s application to facilitate functionalities like pick up, drop service, searching schedule, cancelling, and booking for both the students and the faculty. It will also be inclusive of Bus facility, where the passengers who have nearby drop or pickup location can use this feature to travel via bus and save their time. This will improve the waiting time and will help students and faculty with better transportation facilities. The goal is to improve transportation services for students, staff, and visitors, and to streamline operations for the transportation department. The system may also provide real-time tracking of vehicles and information on capacity utilization, making it easier to plan and manage transportation services effectively.

**Background:**

Many students in Northeastern University do not live on campus due to limited housing facilities, so they opt for housing near the university. Due to different schedules and availability, students are usually caught up at the university at odd timings. Staying at the campus for extended periods of time, some students are at the library, some working on campus, and some may be working out or training for their respective rec activities. Northeastern University for this purpose provides a drop-off facility called Redeye which provides free transport to university students from the university to their drop-off locations given that the drop-off locations be within a 2-mile radius of the university. A centralized database will allow the students or faculty to be able to book the Redeye facility to utilize features like pick-up/drop to the desired location. By reducing data redundancy and setting the pick-up location as Snell library by default can optimize the booking time and ensure students and faculties can find a redeye easier.

**Purpose:**

* Streamline Transportation Operations: To optimize transportation operations by automating scheduling, cancelling, and tracking of vehicles, drivers, and the passengers
* Improve Passengers Experience: The database system will provide students and the staff with up-to-date information on the availability of Redeye transportation services and help them plan their commutes more effectively
* Increase Efficiency: To reduce manual processes and help streamline communication between drivers, passengers, and management staffs, leading to increased efficiency
* Safety and security: The system will enhance safety and security for passengers by monitoring the location of vehicles and providing real-time information to drivers and passengers.
* Enhanced Analytics: The database system will provide enhanced analytics capabilities, including detailed reports and insights into transportation trends and patterns

Project Group Details

Group: 8

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