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**Northeastern RedEye Application User Experience**

I found following features to be particularly effective:

* Simple interface: Students who need to rapidly schedule rides will find the app's simple design easy to use.
* Safety features: The app has safety features like sharing ride details with friends or family, which enhances the feeling of security for students, especially during late-night rides.
* Live tracking: Users can track their rides in real-time, ensuring they know exactly where their vehicle is.
* Predefined routes: By offering a list of predetermined pickup and drop-off locations, the app helps students discover the closest place more easily.

Certain Recommendations suggested:

* Ride share with a group using singl person’s app. This can be done by creatin a pofiles QR code for each user and the user bookig the ride can scan each user’s phone to book a group ride going to the same location.
* Enhanced Notification Personalization: Implement intelligent alerts predicated on user actions. For instance, if a student usually takes a certain route home, the app can advise making early reservations, particularly during peak hours.
* Integrated Route Selection: When confirming a ride, users can view the routes they have chosen on a map, which may assist them in selecting the fastest or shortest route.
* Live Bus Capacity: Indicate the number of seats occupied by each bus to help students make decisions based on capacity levels and to manage expectations.
* Integration of User comments: After every ride, allow users to directly submit reviews using the app. The feedback system can rate a few factors, including overall safety, vehicle cleanliness, and driver behavior.
* Dynamic Scheduling: This can cut down on wait times and pointless trips with a small number of passengers by allowing bus scheduling to be more flexible in response to student requests at certain periods.

Use Cases and Recommended Enhancements for the RedEye Application  
Heavy-Weight Applications  
Use Case 1:

* Customized Reservation and Alert System
  + Actors: RedEye System, Student Prerequisite: The student has regularly utilized the app, which enables the algorithm to spot trends.  
    Synopsis: Student opens the RedEye application.
* Based on past patterns of usage, the system suggests a booking (e.g., same place, similar time).
* To encourage early booking, the student receives a notification regarding peak ride hours.
* The student reserves the ride after accepting the recommendation.
* Until the ride shows up, the system provides real-time updates and validates the reservation's details.  
  Postcondition: The student receives an alert via the app after the ride is successfully booked.

Use Case 2:

* Route Selection and Dynamic Scheduling
  + Precondition: A vehicle is scheduled to depart shortly.  
    Actors: Student, RedEye System, Driver
* The student uses the RedEye app to make a ride reservation.
* The system provides several route possibilities and rates each one based on student comments, weather, and time of day.
* The student decides on their preferred path.
* Based on the total amount of demand from students, the system modifies the vehicle's scheduled route.
* The student gets real-time information on the status of the vehicle and receives updates about their trips.
* The driver follows the dynamically programmed path to pick up the kids. Postcondition: The student takes the safest and most effective path to get to their destination.

Middle-Weight Use Cases

Use Case 3:

* Driver-Enabled Student Ride Addition for Special Circumstances
  + Actors: Driver, RedEye System
  + Precondition: The student has booked a ride and wants to share the ride details.
* Description: After booking the ride, the student selects an option to share the ride.
* The system allows the student to invite friends by sending a notification link.
* Friends can join the ride by accepting the invite, and their pickup points are added to the route.
* All students in the group receive real-time tracking information.
  + Postcondition: The ride includes multiple students, with accurate pickups based on the shared details.

Use Case 4:

* Ride Sharing with Friends
  + Actors: Student, RedEye System
  + Precondition: The student has booked a ride and wants to share the ride details.
* Description: After booking the ride, the student selects an option to share the ride.
* The system allows the student to invite friends by sending a notification link.
* Friends can join the ride by accepting the invite, and their pickup points are added to the route.
* All students in the group receive real-time tracking information.
  + Postcondition: The ride includes multiple students, with accurate pickups based on the shared details.

Use Case 5:

* Ride Capacity Management  
  Actors: Student, RedEye System  
  Precondition: A ride has been scheduled for pickup.
* The student uses the app to view the RedEye buses that are available. Each vehicle's live capacity is displayed by the system (e.g., 80% full, 50% full).
* The bus that the student chooses depends on how crowded they want it to be. As more student’s schedule or cancel their rides, the system updates the capacity in real time.
* Postcondition: The students get into a less crowded car with success.

Use Case 6:

* Feedback Submission Post-Ride  
  Actors: Student, RedEye System  
  Precondition: The student has completed a ride.
* The student receives a notification prompting them to submit feedback.
* The system provides options to rate the driver, vehicle condition, and overall experience.
* The student submits the feedback.
* The system stores the feedback and uses it to improve future services.  
  Postcondition: The feedback is successfully recorded and used to inform future updates or route decisions.

Give auto Drop location within 3 miles.

Phone switch off

Light-Weight Use Cases

Use Case 6:

* Auto-Select Pickup Location: Snell Library
  + Actors: RedEye System
  + Precondition: The student logs into application to book a ride.
* Description: When student is about to book a ride, it should auto select the location at Snell library.
* Since Snell Library is the only pickup spot for RedEye, the application should not prompt the user to select a pickup location. Instead, it should only require the drop-off location as input.
* The system allows students to add their drop up points.
* This way we reduce the little time on booking.
  + Postcondition: The ride includes default pickup point i.e Snell Library and student only adds the drop off location.