CS 446/646 Project Proposal: CarLOOp
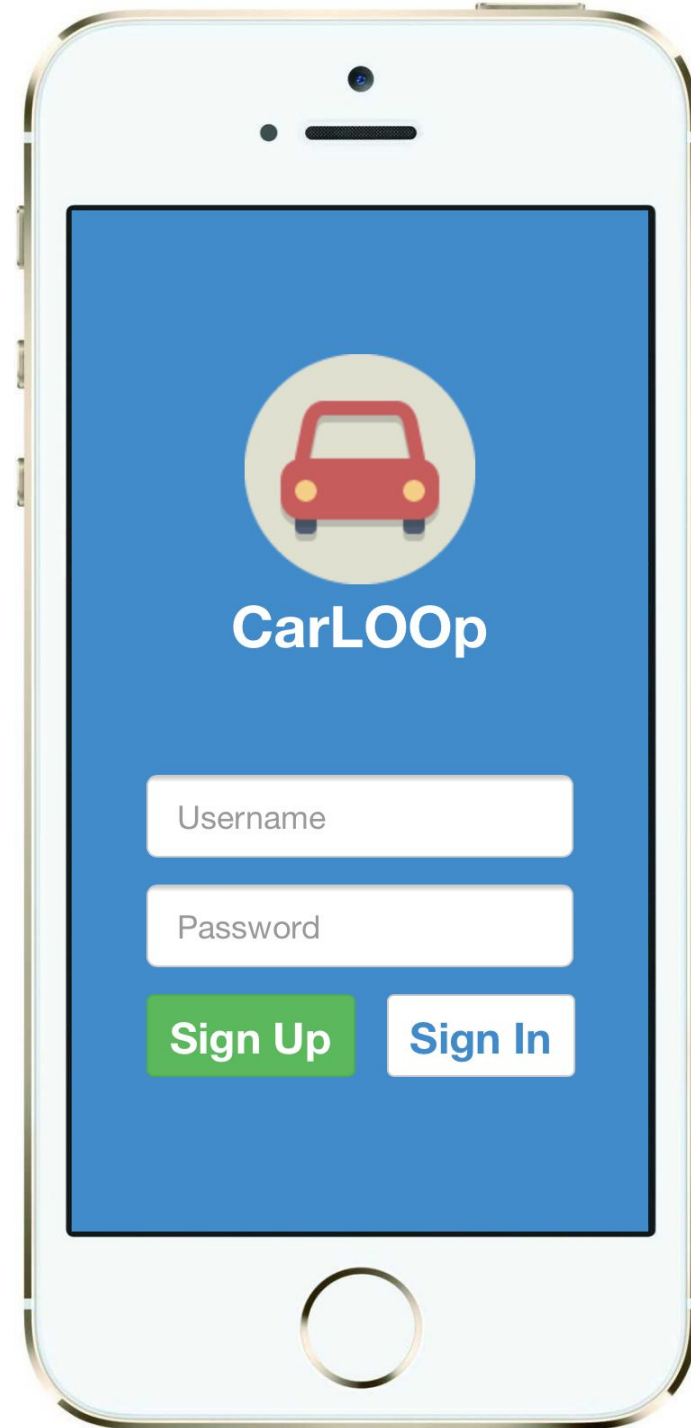
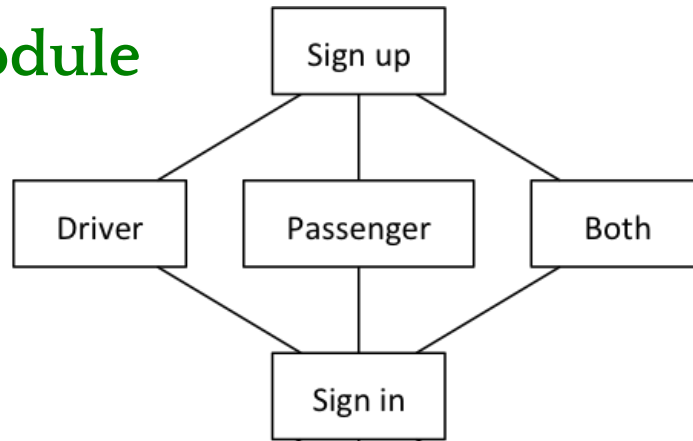BUF: Yongqi An, Xin Jin, Lingyun Li, Zijin Li

CarLOOp

- **Purpose?**

For those who have experience in carpool, they might find it's difficult to find carpool information. Even though they have found one, the **negotiation** between drivers and passengers on pick-up time and location becomes a serious problem.
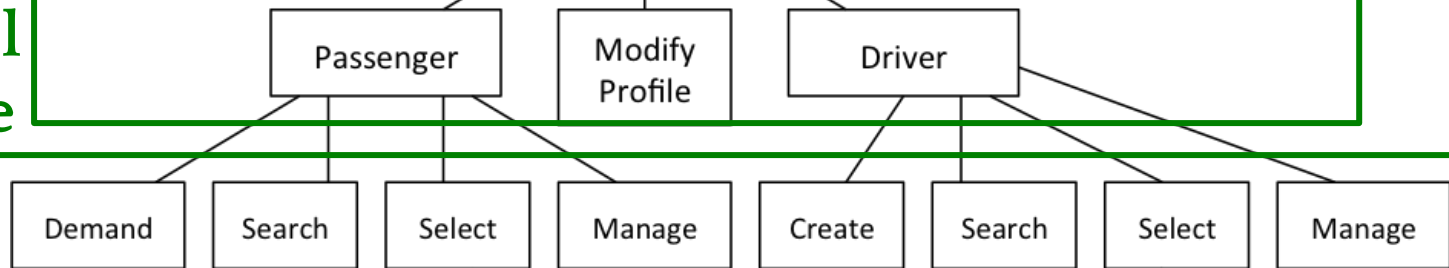
Therefore, a well-developed application for carpool is necessary and significant.
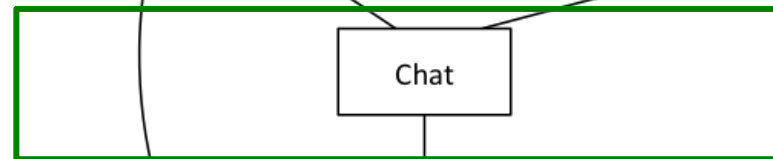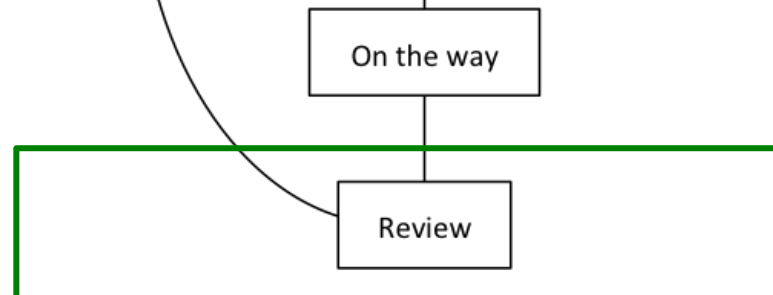
User Module

Sign up

Driver | Passenger | Both

Sign in

Passenger | Modify Profile | Driver

Carpool Module

Demand | Search | Select | Manage | Create | Search | Select | Manage

Chat Module

Chat

On the way

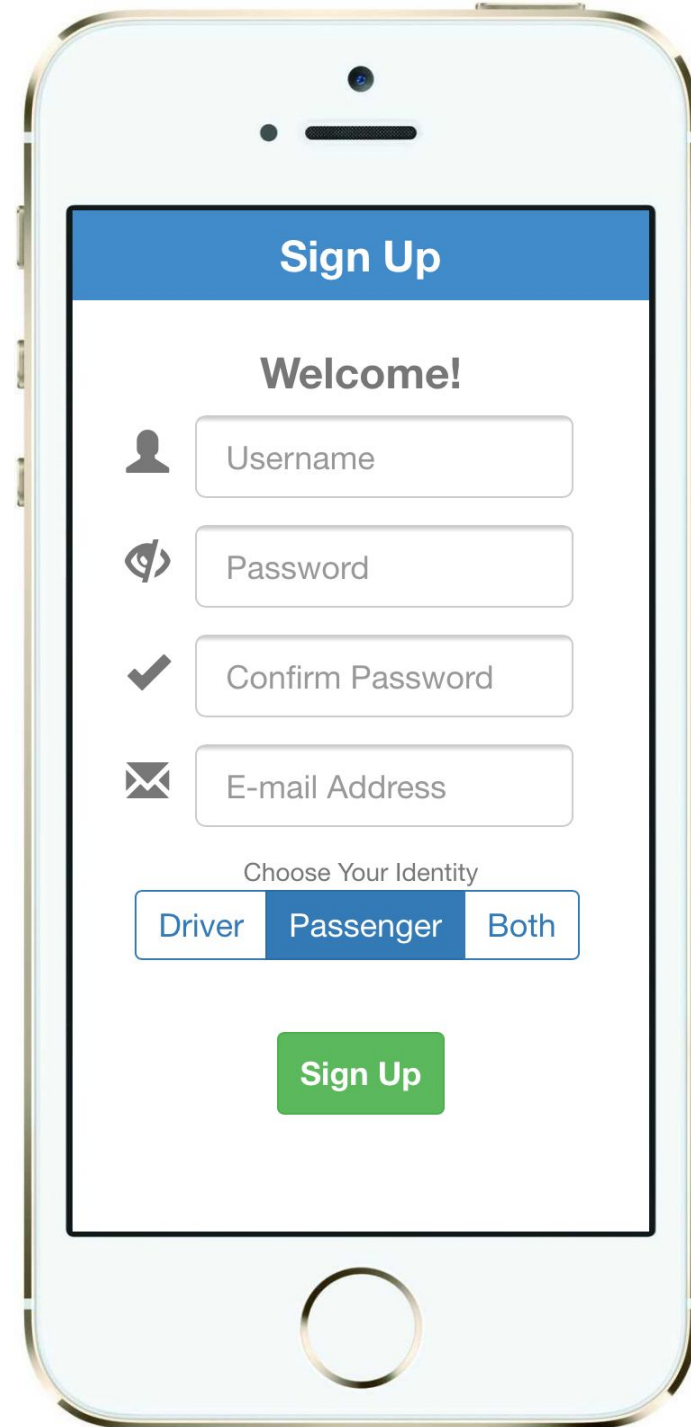**Review Module**

Review

User Module

- **Sign Up**
  - First-time users of CarLOOp need to sign up for an account.
  - Users need to provide their basic information.
  - Choose their identity as a driver, passenger or both.

User Module

- **Sign In**
  - CarLOOp will remember the input information once the user login in for the first time.
  - This app will have **two sets of UI** designed for passengers and drivers to access different functions.
  - For users signed up as both identities, the app will display the UI for drivers as default and will allow users to switch their identity in the app.

User Module

- **Manage Profile**
  - Users can add and edit personal information to their profile.

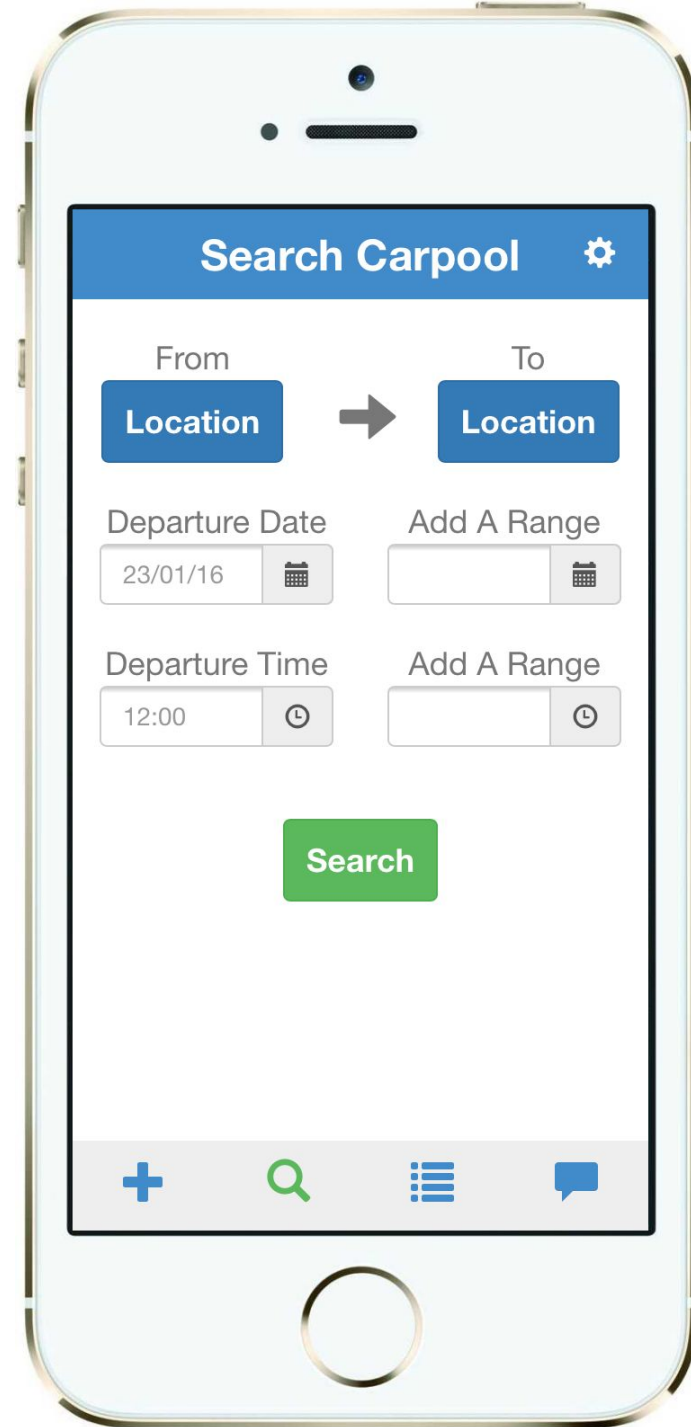 - Users can also reset and retrieve their passwords.

Carpool Module

- **Create Carpool** (drivers)
- **Demand Carpool** (passengers)
- Carpool Info:
  - Departure & Arrival Location (set through Google Map API)
  - Departure Date & Time
  - Ideal Price
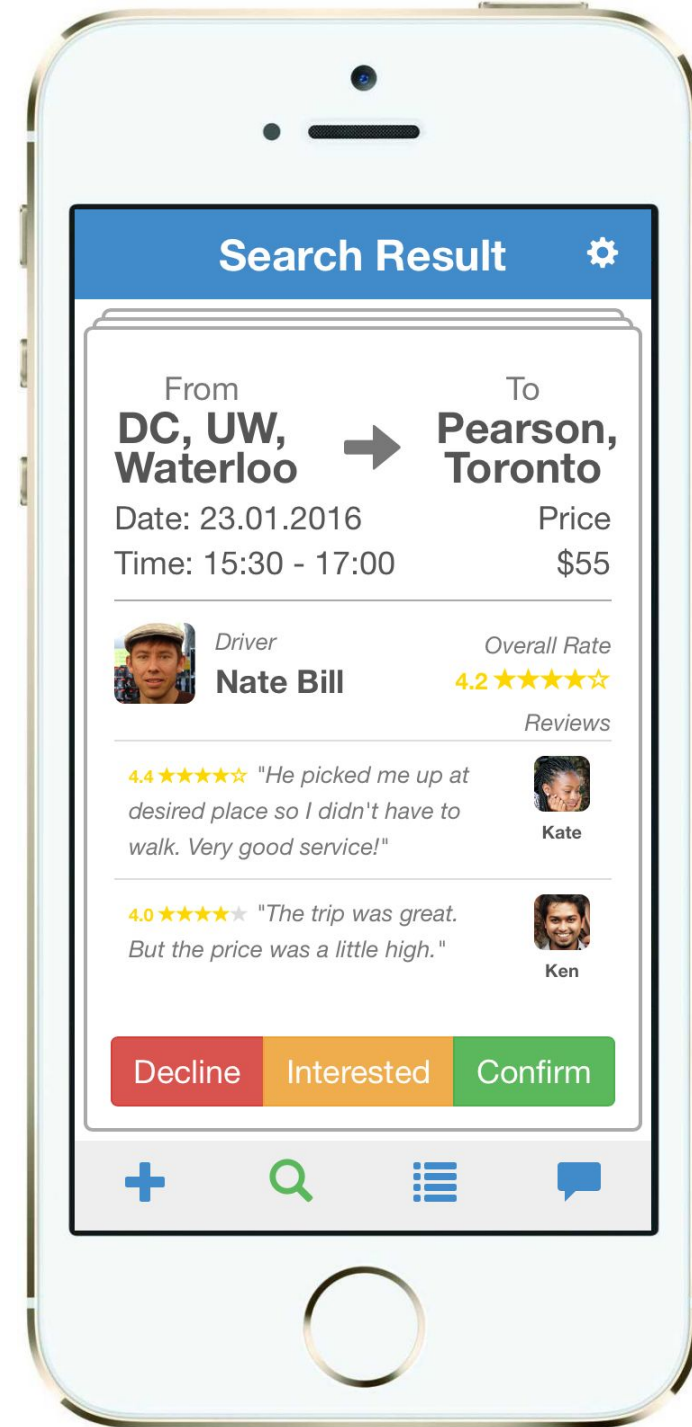 - Max Passenger (drivers)

Carpool Module

- **Search Carpool**
- Search Algorithm:
  - Valid date and time
  - Shortest walking distance
- Search Result:
  - A list of top-matched carpools
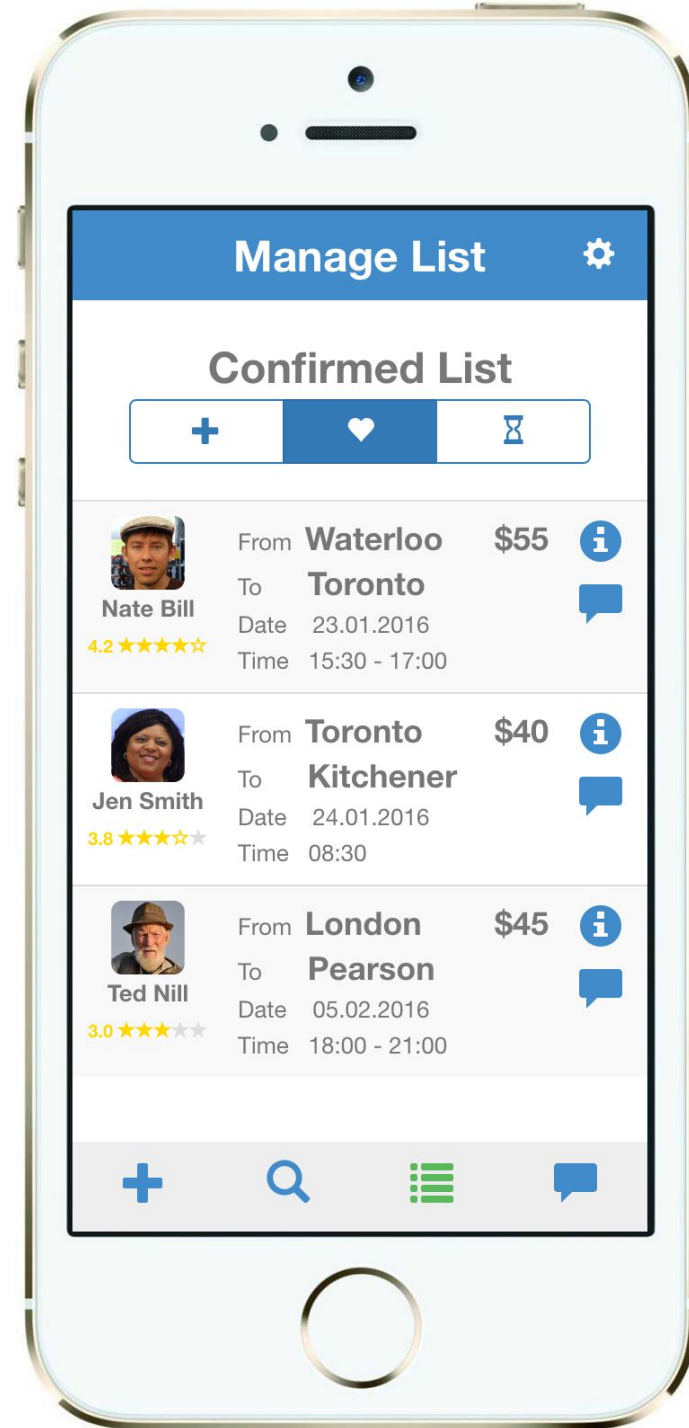
Carpool Module

- **Select Carpool**
- Select from search result
  - Carpool Info
  - Driver's Rating & Reviews
- Decline: Bad match
- Interested: Check later
- Confirm: Perfect match

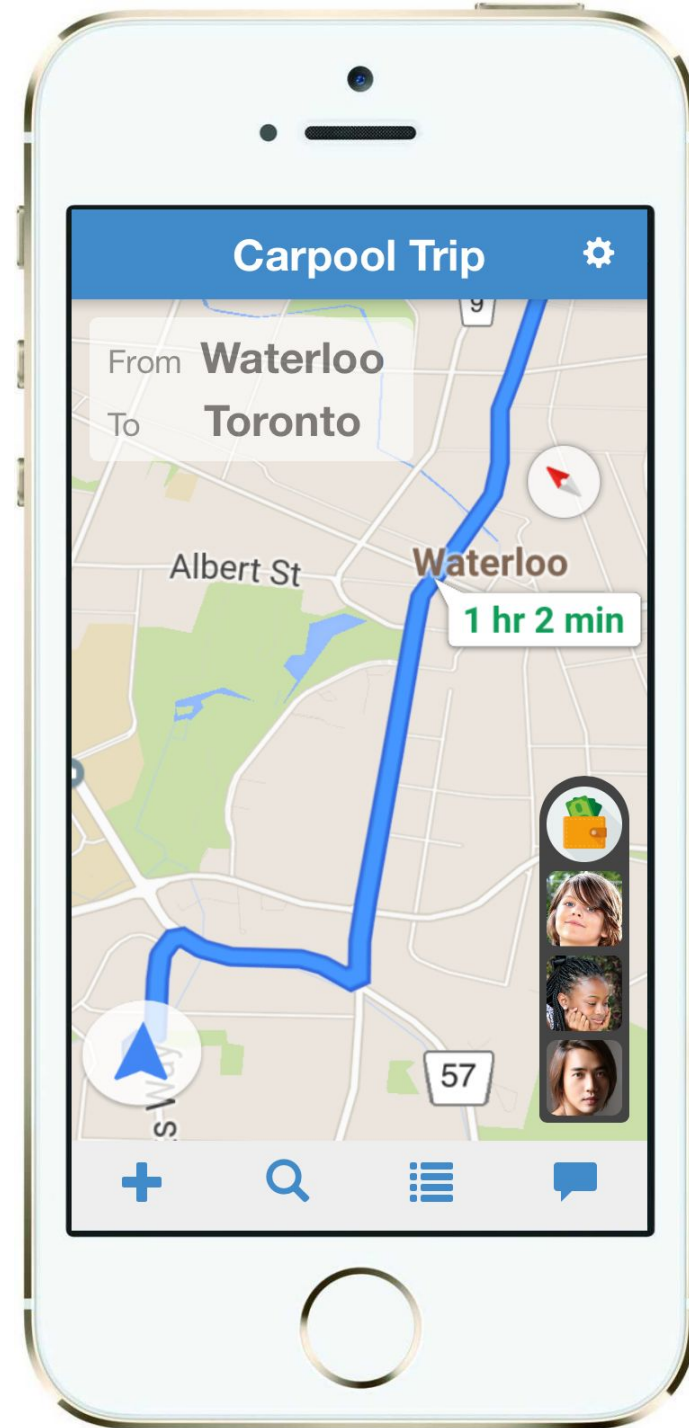- Drivers can search & select among demanded carpools

Carpool Module

- **Manage Carpool List**
- Demand List:
  - Edit demand post
  - Receive notifications
- Interested List:
  - Check, compare carpools
  - Discuss carpool details
- Confirmed List:
  - Check schedule
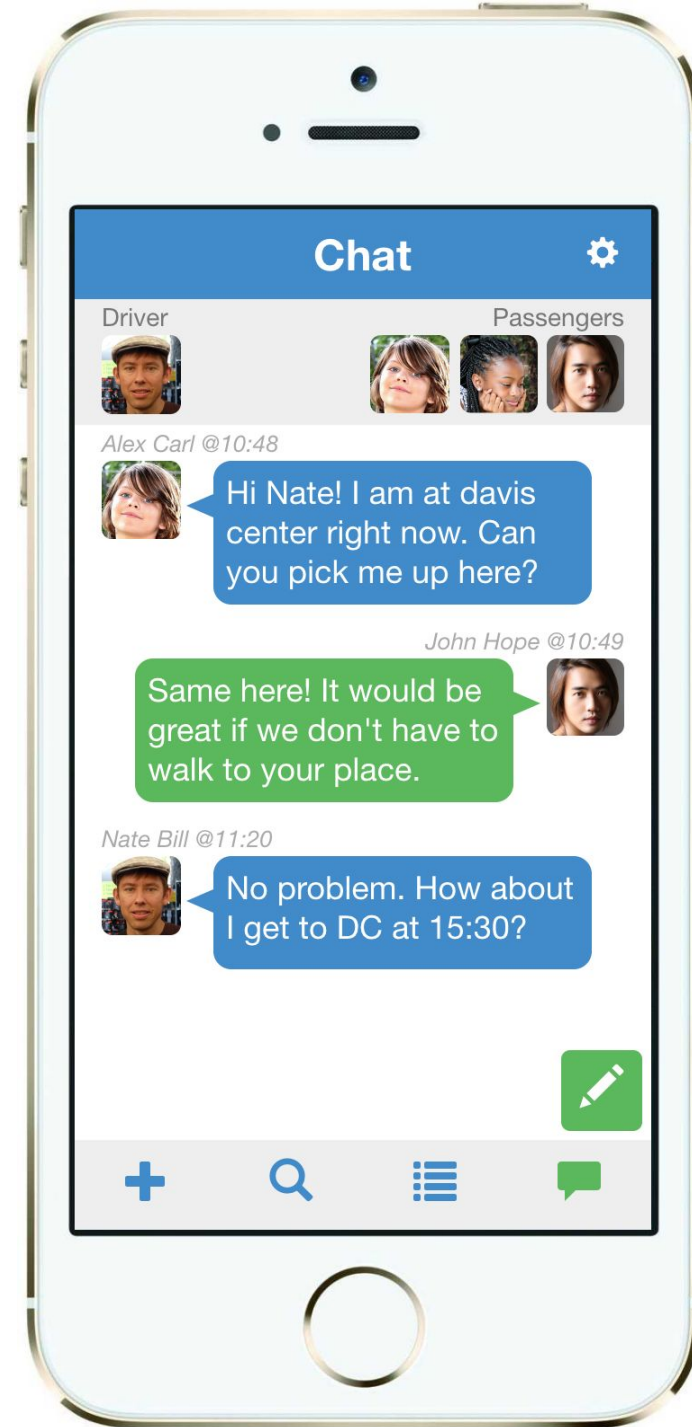 - Complete carpool trip
- Drivers: Created List

Carpool Module

- **Carpool Trip**
- Before:
  - Passengers confirm they get in the car
- During:
  - Navigate driver to destination (Google Map API)
- After:
  - Driver confirm payment
  - Passengers rate & review

Chat Module

- Automatically join real-time group chat for interested Carpool postings
- Discuss details, departure time, price, pickup location, etc

Review Module

- Rate driver and write reviews after trips
- Serve as reference for other passengers

Thank you! ☺

CarLOOp