

TYP Progress Report 22/11/2022

Overview

- We researched already existing carpool apps and listed their features to get ideas.
- We have listed features that we would like to support
- We have looked into how to tackle the “technical difficulty” requirement
- We did our project proposal and presentation.

Existing Carpooling Apps + Features

Uber

- Choose saved places.
- Previous activity of trips.
- User/driver ratings.
- Visual representation of route.

University Carpools

- Driver mode to schedule rides.
- Bio for driver and user.
- User reviews for drivers.
- Button to notify users that the driver is on the way/arrived.

sRide

- Connect with other users through interests.
- Find nearby people with similar interests.
- Page to list upcoming rides.
- Visual representation of route.

Lyft

- Each carpool option displays a price.
- Choice of how quickly to get picked up.
- More efficient routes if the user decides to wait longer.
- Driver/user reviews.
- Visual representation of route.

BlaBlaCar

- User verification through id, email and phone number.

Features We Would Like To Support

- User/driver ratings.
- Visual representation of route.
- Driver mode to schedule rides.
- Page to list upcoming rides.
- Bio for driver and user.
- Button to notify users that the driver is on the way/arrived.
- Sign up only allowing emails that end with '@mail.dcu.ie' to limit the application to dcu students

Ethical Approval

Not started yet

How To Address “Technical Difficulty” Requirement

Travelling salesman problem - Looked into and is under consideration for how it may be implemented

Dijkstra's algorithm - Used to find the shortest path/routes between nodes on a plane. Using this algorithm we can find the shortest path to get from the driver's location to DCU efficiently given multiple deviations.

- Identify core vs optional functionality
- Database options in the functional spec
- Basic app tutorial to get head around it early
- Ethical approval form
- Marks sheet (Module home page)
- Minimalistic enrollment process