

Introduction

With ever rising fuel prices and increased traffic on our roads, the Co-Mute project was started in an effort to help alleviate some of these pressures. Car-pooling can cut on travelling and vehicle maintenance costs. It also enables more effective use of commuters' time, as time spent driving could be spent more productively.

Purpose

The Co-Mute project serves as a market place for commuters to form, find, and join car-pool opportunities.

Requirements

Register New User

The system must provide the functionality for a new user to register. They must provide the following information:

- Name (required)
- Surname (required)
- Phone (optional)
- Email (required)
- Password (required)

Register New Car-pool Opportunity

Functionality to register a new car-pool opportunity must exist. The following details must be captured:

- Departure time (required)
- Expected Arrival time (required)
- Origin (required)
- Days available
- Destination (required)
- Available seats (required)
- Owner/Leader (required)
- Notes (optional)

A user can create any number of car-pool opportunities, however they cannot register two car-pool opportunities with overlapping time-frames.

The user that formed/created the opportunity will be the owner/leader.

Join/Leave Car-pool Opportunity

Users can join an existing car-pool opportunity. They will only be able to join should there be capacity to do so. A user can join multiple car-pool opportunities as long as their time-frames don't overlap. Users can also leave a car-pool opportunity at any time.

Search Travel Opportunities

Search of car-pool opportunities should be available to all registered users.

View Created Car-pool Opportunities

A listing of all car-pool opportunities created by a user should be available to logged-in users. The date they created the car-pool opportunity should also be visible.

View Car-pool Opportunities Joined

Users should be able to view all the car-pool opportunities they have joined as well as the date they joined them on. This page will be the landing page for logged-in users.

Login

Users must be able to login using their email address and a password they provided upon registration. The login page will be the landing page for users that have not registered or has not logged in yet.

Profile

The profile page will provide the user with the ability to update their details.

Additional Notes

[1] Any SQL data store can be used for persistent storage.

[2] Due to the prevalence and convenience of smart phones, Co-Mute is planning on developing mobile applications in the near future. The functionality described above should be available for consumption through a RESTful API.