**CSCI 3308 Milestone One Proposal**

Team Name: Carpool.io

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Project Description:

We plan to create a website that helps facilitate the student organization of carpools to various locations in the Denver Metro and Front Range area. Carpooling benefits users by lowering the cost of gas, wear and tear on the car, reducing the volume of traffic, and helping the reduce the environmental impacts associated with driving. Our website will allow students to set up carpools to destinations such as ski areas, concert venues, and sporting events. Frequently visited areas such as ski mountains will each have their own subpage that students can visit and post on to find or offer rides. In addition our platform will feature an open forum like area for students to post if they are looking for rides to less visited destinations.

The website will be closed to university students only. Setting up a carpool program open to the public might be difficult to manage. The high volume of users, wide age range, and large spatial distribution of user’s homes might discourage people from using our website. Using students as our focus group will encourage easy meet ups since most students generally live in the same 5 mile radius. Furthermore meeting with people you don’t know can be uncomfortable. By limiting our user group to only CU students who are all similar age and have similar interests people might be more encouraged to use our website. To increase the sense of trust and comradery between users we plan to include a rating system on which users can rate each other on the ease of travel. Furthermore users will be encouraged to set up profiles that contains information about themselves so carpool companions can know a bit about the person they are going to travel with.

Vision Statement: To create an easy and straight forward method to facilitate CU students carpools that help save money, reduce environmental impacts, and encourage the creation of friendships.

Motivation: Carpooling benefits users by lowering the cost of gas, wear and tear on the car, reducing the volume of traffic, and helping the environment. Often it can be hard to find people with similar interests that are looking to share a ride to a certain destination. Driving alone can be costly and lonely! By creating an online platform that helps CU students connect with their peers in a ride sharing program we hope to encourage friendships, help students save money, and reduce the volume of traffic and its associated environmental impacts.

Risks: One of the most difficult parts of working in a group with six people is finding times that everyone can meet and discuss / work on the project. Unequal group involvement can be troublesome and lead to a heavy loading of work onto a few members the group. Other risks include lack of experience in website creation and knowledge in other areas of product development.

Risk Mitigation Plan: Mitigating these potential risks will require strong communication between team members. It is important that we frequently check our emails, texts, and *Telegram Messenger* to make sure that any updates or plans to meet have been seen by everyone. Furthermore we will need to plan out group meetings far in advance to ensure that everyone can meet. In order to avoid the risk of being unknowledgeable in certain areas of product development we plan to use online resources to learn the necessary materials and frequently meet with course assistants and TAs to get help.

Version Control: We plan to set up a github repository to share all work done by the group. This will not only include source code, but also notes and milestone reports.

https://github.com/guso9085/myCUpool

Development Method: We plan to use the AGILE development method. We believe that this is more advantageous than the waterfall method because it allows us to develop and test small sections of our website / project before creating an end product.

Collaboration Tool: We decided to use *Telegram Messenger*, a cloud based instant messaging service which can be used on our computers and mobile devices.

Proposed Architecture: For the front end webpage development we plan to use the REACT.js library. We do not currently have a plan for our backend development but we will most likely use python and SQL to create data structures that store information for user profiles, user ratings, car and ride information. The front end development would be responsible for the appearance, navigation, and functionality of the website. s