**Software Engineering**

Milestone 1 – Proposal

Team 136

Members:

Team name - Enigma

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Abstract:

* What is it?

We are building a carpool app for BU. Our primary idea is to develop a system which can arrange people with the same journey in a single vehicle to ensure optimal safety of passengers. Also, the passengers will have a say with whom they’re willing to travel, such as friends, colleagues etc. which will ensure the safety of the passenger and gain trust in the services as well.

* Purpose:

Our purpose is to make the journey economical in terms of emission and guarantee the safety of passengers travelling via cabs. Our service is based on providing mobility with comfort, as it combines mutual destination information of passengers, and decides optimal pairing and carpool service.

* Everyday Scenarios:

In our day-to-day life, as a college student or an employee working in a company which is isolated from the city, it is quite difficult to find a cab or such services which will take you to your favoured destination. Even if we manage to find a cab by luck, the prices will be over the roof. Also, if a female is involved in the same situation during night hours, there is a risk to their safety as well.

Problem:

Generally, the cost of solo travel is quite high. Often, late booking causes passengers to take the first option available, without rationally thinking about how or with whom they should travel with. Another conflict is that women do not feel comfortable travelling alone, especially for long journeys. Late-night travelling is risky and not suitable for anyone, as there is always a risk of mishaps on the way. Booking different cabs increase traffic, which in turn affects the environment negatively. According to a survey, most cab ride mishaps happen when the passenger is alone and especially when it is night.

Proposed Solution:

It is not like the traditional taxi businesses such as uber, ola or any local taxi services which operate on rigid contracts rather our idea is to focus on grouping passengers and connecting them with those drivers who are travelling on the same route. Unlike other companies, our idea consists of customer reviews for other customers as well as cab drivers. It will give them a clear-cut view of who they are travelling with and where they’re travelling to. There will be a recommendation algorithm that will display your preferred contacts who might be travelling to nearby destinations.

Technology stack:

 Python, flask, react, MySQL



Functional Requirements:

REQUEST RIDE HOPOUT

* Working step by step:
  + User: login/sign-in
    - Entry given by User to book passengers:
      * + Enter place time and destination
        + Number of people to travel with
        + Route
        + Mode of transport
        + Price of cab
        + Confirm booking
  + Passenger:
    - login/sign-in
    - Enter drop details
    - Select preferred user
    - Departure Time
  + To select passenger (passengers list): function for user/day scholar:
    - Passenger can be selected via user and then request will be confirmed on the side of passenger
    - Recommendation system for passenger selection

Your contact person or the one you travel the most will come first in the list.

* + Ride confirm:
    - Once the ride is confirmed, the price of cab will be divided amongst the passengers and the user
  + Day scholar:
    - Login/Sign-in
    - Enter daily route
    - Enter time
    - Minimal charge per km (based on fuel).
    - Number of passengers to be selected.
    - Mode of transport