Ride Coordination Service for the Yale Community

Most of the Yale community does not have a means of transportation. Throughout most of the year, this is not an obstacle as most students rarely travel far from Yale, excluding trips to New York. The beginning and end of breaks, however, results in many students traveling to airports. If the student is flying from Hartford there are currently only two options. The first option is to use a service such as CT Limo or GO airport shuttle. These services are begrudgingly used by many students despite regularly providing bad service at a relatively high cost for what you receive because there is no good alternative. The other suboptimal option students have is to rent a car or request an Uber. While these services allow students to avoid poor service, they are now forced to pay a higher rate.

My solution takes advantage of the fact that many students will be flying out on the same day at roughly the same time. Any student that has used a service like CT Limo will have noticed that many of the other patrons riding in the van are fellow Yalies. If the students had been able to coordinate ahead of time, they could have simply requested an Uber to take them to the airport at an agreed upon time. Sharing an Uber allows students to take advantage of the excellent service Uber provides while cutting down on the cost to get to the airport. Sharing an Uber or rental car with only one person is already significantly cheaper than CT Limo, and if shared with more students the savings are simply increased. In this solution, students would create travel appointments on my web service which would allow them to match with other members wishing to travel to the same destination at roughly the same time.

As this is a service primarily for Yale students, I plan on releasing versions to the Yale community and then make changes to the product based on community feedback. Unfortunately, the primary times
this service will be used is for breaks which means that spring break will be the only time I can expect to receive a substantial amount of feedback. Regardless, I will attempt to receive as much feedback as possible even if it is from people only testing the app and not actually using it for real travel purposes.

I plan to use Django for my database and web service. Thus, I will be coding in Python and using HTML, JavaScript, and CSS for the website. I have a little experience with this from previous projects, but much of it will be learned as I do it. I will likely be using Heroku to host my website. If I settle on the design and features for the app early and feedback supports that these are desirable with little room for improvement, I will then work on an android app. The Android app will use the same database and be functionally equivalent, but will provide users with a more convenient method to use the service. The Android app will be coded in Java. As rough timeline, I plan to have Heroku and my database set up within two weeks. I plan to have a website with at least basic functionality working by spring break.

As I have mentioned above, this is primarily a service for the Yale community specifically focused on easing commuting to airports. I have focused on this particular situation as I have identified a large need for something like this. However, there is no reason for this service to be limited to such a narrow use case. Therefore, as additional stretch goals to the Android app, I would like to scale this and make it universal so that it could be used by any community that adopts enough users for it to function. The Yale community is most likely trusting enough for their travel plans to be public to the entire Yale community, but if I make this universal there are several features I may potentially add. First, I may add friends list that could be synced with Facebook or added manually. To make use of the friends list, users would be given the option to post travel plans to only their friends or publicly. Users would also be able to search for friends travel appointments or all public appointments. Alternatively, or in addition to this I may add ratings system so that users can rate each other and write comments after a ride. If my app is limited to the Yale community, this functionality is probably unnecessary as people will only use it a few times per year and I would not like ratings and comments to show until users had used the app several
times. Another stretch feature would be to incorporate a payment method into the service so that users could be insured payment from all parties and not have to deal with the awkward exchange of money. Which features get added will depend on user feedback. Someone may suggest a vital feature that I have not listed above that becomes higher priority than all other stretch features.

Deliverables:

- Web Application
  - User Login/Creation
  - Intuitive appointment creation
  - Matching capability for users to agree to ride together
  - Database for storing the above information
  - Communication functionality with anonymous emails or chat feature

- Github of Project Code

- Final Report

Stretch Features:

- Android App
- Potential friends list and corresponding search and posting features
- Ratings and comments
- Payment method