**Summary/description**

This app is designed for students in order to helping with transporting among five colleges, so students can use it to order a ride, offer a ride, or share a ride. Currently, we have limited buses which transporting among five colleges, and all of them have regular schedules. Sometimes buses come every 40 minutes, but sometimes students need to wait buses for more than an hour. This app will be very similar to "uber" which can only use by five colleges students. If people who want to go to another college, they can order a ride in advance. Drives (students who have a car) can decide whether they would like to accept the order. Once an order is taken by a driver, the driver will pick up the passengers according to the time and place that they provide in order detail.

**Why the app?**

1. Personal experience: I wanted to take a course which only offers in Smith, but total time it costs back and forth is more than three and half hour. Even though the class only has 75 minutes, I need to wait buses to come for more than an hour. It's too time-consuming, so I finally decided not taking that course.

2. In another CS class, we did a group discussion about inconvenience of transporting among five colleges and difficulties of booking a car in uber. More than 2/3 of people from that class agree that transportation is one of the biggest challenges that they would like to solve by technologies.

3. After that, I realized that the inconvenience of transporting in South Hadley is not a problem not only for me but also for all students who don't have cars. It's really frustrating if they want to go to somewhere else, but the bus schedule doesn't match with their schedule. Then I interviewed some of my friends who don't have cars and a friend who has a car.

4. When I interviewed my friends who don't have cars about inconvenience of transportation in South Hadley, everyone said that if they want to go outside, they can only either take buses or ask a driver that they know ahead of time. Since most of international students wouldn't buy a car in here, I think my friends' answer represent that of most international students. Some of them gave inconvenient experience examples. For example, once they need to go to Social Security office to get their SSN done. Even though the office is in Hadley, not too far away from here, there is not a bus that they can take to directly go there. They requested a ride a day, but there was not a driver would like to take that order. Another example is that one of my friends attended an event in Smith. The event ended around 9pm, and they tried to book a car in Uber. But they waited for about an hour without getting any reply as well. Finally, they could

only call a driver they knew before who lives near MHC. Since it was late, they all felt sorry to ask the driver because it is urgent, but they have no choice. Also, one person mentioned that Uber is expensive, and buses are free, so in order to spend less money in transportation, they always need to time in waiting bus.

5. I also asked one of American friends who has a car. She said because she has a car, if she wants to go to other towns or malls, she will just drive to there. Even though it takes some time, but that's fine. And I asked will if she is willing to take people if they are going to the same place. She indicated that if she is heading to Amherst, and someone also wants to go there in a similar time, she would like to take them even for free. So I believe that if she can earn some money in providing a ride, she should be happy with that as well.

Based on these reasons, I think having an app for transporting among five colleges will be helpful.

**Persona**

Name: Marina

Background: a MHC student, Marina, who has night classes in Smith College every Monday and Wednesday.

Challenge: Even though she can take the last 39E from MHC to Smith before class starts, there is not any bus that she can take to come back. She wants to find if there is someone who also take night classes at Smith or someone who is available to drive her back during the time. She only knows limited people in MHC and nobody else in other colleges, and none of her friends have a car. She tried to book a car in uber, but there was no driver available. There is not a platform that she can post on so that everyone in five colleges students can see it, so it's really tough situation for her.

Now, the only way for students who don't have a car to go to another college is to take transit buses. But sometimes there is not a bus come when students need. Maybe it will be easy for Amherst students or UMass students to request a ride in uber, but for MHC student it always takes more than half hour or even no driver is available around this area.

Goals: Marina can take evening class in Smith and come back to MHC even outside 39E's service time.

**Ideas:**

1. Have a UI which is able to authenticate user identity
Require some certifications like student one card (required for everyone), driver license (required only for drivers), license plate (if drivers have a car)
Need to make sure students can provide a ride are qualified for being a driver.

2. Have different UI for drivers and passengers, and a user is always allowed to switch characters between these two.
The information/function that drivers and passengers need are different. For example, passengers should be able to submit an order, and drivers should be able to see all orders, choose whether they would like to provide a ride.

3. Enable passengers to select pick up and drop off position.
This app should be able to select more specific location in five colleges campus. For example, it can select a certain academic building, residential hall or dining hall.
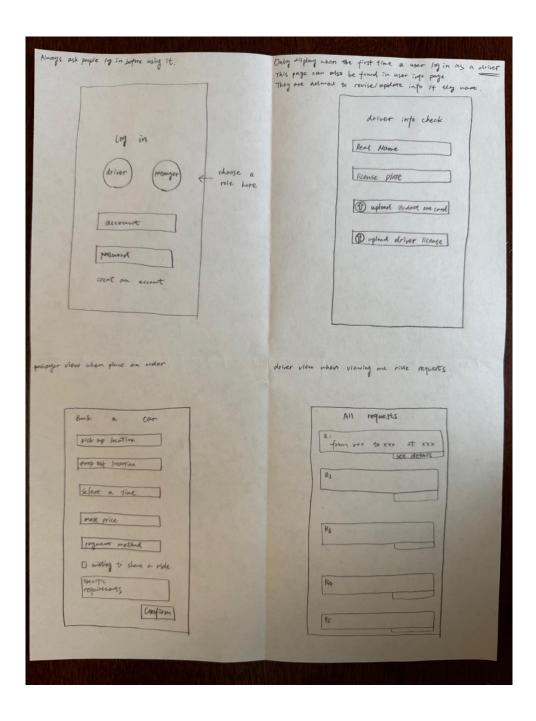
4. Be able to track current location
During the ride, the app should be able to keep track of passenger's real-time location, which can not only make sure passenger's safety but also check if driver is driving in the expected route.

5. Have access to payment functions
Provide several payment methods, like apple pay, credit card, etc. (maybe give a cash option as well?)

6. Allow students to enter more specific requirements for the ride, like the maximum price they would like to pay for each ride, if willing to share a ride with other, etc.

Since I thought this app should be somehow similar to Uber or Lyft, I first considered about what functions they have. For example, being able to set up pick-up and drop-off location, use online payment and keep track of location during trips. Those functions I definitely want to include in my app.

Even though there are some similarities, this app is only for students among five colleges, then there should have more restrictions than Uber and Lyft. For example, verifying their student identity. It will be convenient to allow passengers to choose any buildings on any campus as their pick-up or drop-off location. Second, it's possible some students don't have access to mobile payment methods, so I considered leaving a "cash" option under payment function. Third, since drivers can pick-up or drop-off passenger on their way to somewhere, drivers might be willing to charge less Uber drivers do. And for most of students, they cannot afford high price like full-time employees can. So instead of the system automatically set up the price like Uber and Lyft do, this app allows passengers to enter the price they can afford. Some rideshare apps automatically assign requests to drivers (I am not sure whether this happens in US, but I know it

does in China because last time I did ask drivers about this…), this app won't assign requests to drivers. Instead, drivers can accept whatever requests they want, which means that drivers can ignore requests if the maximum price that passenger gives is lower than their expectation, or passenger gives has weird additional requirements.

Since some students even though they have cars, sometimes they might need a ride as well. We should make sure that this app allows user to switch roles between driver and passenger.

**Evaluate**

I think this app can help more students with transporting. Sometimes when I need to go to other colleges, but bus schedule doesn't work for, I have to ask people I know if they can take me there. So I do hope there is a platform that can help students find a available car easier. It may have some challenges as well. For example, it's really hard to let everyone use the app, so if there are only a few users, then transportation problem still cannot be solved. The app will work well only if many students who have a car would like to download and actively use it. So I think if there is anyone can come up with good ideas to advertise the app and attract users (both drivers and passengers), the app will be a super helpful for students.