Product Backlog - Team 17
BoilerRide

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Problem Statement:

Sharing a ride can help save money, be environmentally friendly and be fun. Unfortunately, there is no common central platform for it at Purdue as there are in other parts of the world. However, there are still many students, including international, that do not have a car that would appreciate ride sharing over taxis, shuttle services, trains or buses. With such a large student base at Purdue, which ensures a selected and secure user group, we will develop a mobile application that satisfies these needs.

Background Information:

Audience

Our target users consist of both, people looking for a cheap and convenient ride and people offering rides, which gives them the opportunity to split costs, be helpful, and have fun. We will introduce our services specifically to the group of Purdue students, employees and any other persons affiliated to Purdue.

Similar Applications

There are a few pre-existing applications for ridesharing. Some examples of such applications include Flinc Ridesharing, Uber as well as many other transportation applications. The combination of a restrictive user base and a focus on economic trips differentiates us from these and other similar apps on the market as well as makes our application far superior in user security and ease of use. There is also a Facebook group for purdue students to share rides. However, the usability is not that convenient like it will be in our app; you can not search for rides and must scroll through posts in dire hope to find a ride that meets your needs.

Limitations

The biggest limitation and flaw in our competitor apps are the personal security flaws that come with a complete stranger picking up the user. One way we address this limitation and differentiate our app is by restricting the user base of the app to Purdue affiliates only, however, we will rely on driver's ratings on records as the main safety feature. While the restricted user base can be a limitation, we think this also offers some opportunities such as making the app more secure and putting users at ease about the interactions they are going to experience. In addition, most similar apps allow the driver

to charge as much as they would like for a ride, however, our app sets a maximum limit on the price per mile a driver can charge their passengers. Furthermore, apps such as Uber and similar taxi services only allow for real-time services, while our app allows real-time and future services, allowing the user experience to be more flexible. Finally, what makes our app even more unique is the pairing of passengers looking for a ride to a particular location but if there is no available driver; the passengers can then get in contact and can share a taxi service.

Requirements:

Functional

- **As an administrator, I would like to:**
    1. store the information of the drivers.
    2. send verification emails to the users.
    3. have the drivers put their profile picture.
    4. suggest a payment method (e.g. Paypal, Venmo, cash).
    5. set the max price drivers can charge.

- **As a user, I would like to:**
    1. choose if I am a new or existing user.
    2. a brief tutorial of the application.
    3. create an account.
    4. login into my account.
    5. confirm my Purdue email.
    6. choose if I am a driver or passenger.
    7. have the option of resetting my password.
    8. see my notifications.
    9. contact other users.
    10. set my privacy settings.
    11. give my ride share post a title.

- **As a driver, I would like to:**
    1. know my passengers reviews.
    2. offer a ride.
    3. review the passenger.
    4. set how much I am charging for a ride.
    5. know the passenger's contact information.
    6. change the information about my offered ride.
    7. set the maximum number of passengers with me on the ride.
    8. see my path on a map.

● **As a passenger, I would like to:**
    1. request a ride.
    2. look for other passengers for trips with similar destination.
    3. see a list of all the rides offered.
    4. see a list of the rides offered sorted by my filter choice.
    5. see a list of all the rides requested.
    6. see a list of the rides requested sorted by my filter(price, driver rating, time, etc.) choice.
    7. search list of rides by keywords
    8. change the information about my requested ride.
    9. review the driver.
    10. see my drivers reviews.
    11. be redirected to a payment app to fulfill the payment.
    12. set the number of passengers going with me on the ride.
    13. know the estimated time of the ride.
    14. know the estimated fare of the ride.
    15. know the driver's contact information.
    16. set the pick-up time.
    17. set my drop-off location.
    18. set how much I am willing to pay for a ride.
    19. see my path on a map.

Non-Functional
    1. The application will run on an android device.
    2. Must be able to integrate Google maps.
    3. Must be able to use the GPS.
    4. Must be able to integrate with some backend web server service(e.g. Amazon Web Services or Firebase) (time permitting).
    5. The interface needs to be simple and user-friendly.
    6. Must only allow Purdue affiliates to use the app.
    7. As a user, I would like to have fast response times and efficient use of bandwidth.
    8. The consequences of security breaches are low, and therefore the only security precautions we will take are data encryption and connection encryption between client and server.
    9. The connections between the UI, server and database will be strong.