Software Requirements Specification (SRS Document)

Taxi Software

9/26/2024

Version 1

Avery Killian,

Carter Gibb,

Gia Nguyen

1. General Description

This software will provide a taxi-like service, similar to apps such as UBER and LYFT, to allow users to request pickup and drop off at specific locations and have drivers deliver them to that location.

2. Features

This software is designed to allow customers to easily and safely get a ride to a location, with a driver they can feel comfortable with, while providing providers the ability to make some money by accepting a customers request, picking them up, dropping them off, and getting paid based on their speed, safety, and professionalism.

Two way Rating and Review: A rating and review section applicable to both customers and providers so that both parties feel safe and comfortable interacting with the other.

Report System: A system dedicated to handling reports of extreme measures for either customers or providers to add another level of safety and security for the parties.

Interactive Map and Location Service: The customers and providers who use our map will have access to a built in location and gps service to make pickup and drop off as easy as possible for all parties.

3. Functional Requirements

-FR0: Allow users to create profiles as customers or providers

-FR1: Allow users to see currently active customers/providers

-FR2: Allow customers to request a ride to a location

-FR3: Allow drivers to receive ride requests

-FR4: Allow drivers to accept or deny requests

-FR5: Allow users to view respond and create ratings/reviews for themselves and others

-FR6: Allow customers and providers to make reports regarding company policy

-FR7: Allow System Admins to view reports

-FR8: Allow System Admins to punish appropriate parties

-FR9: Accounts are protected with logins

-FR10: Providers will be verified by System Admins

-FR11: Accounts will be created separate for Admins

4. Non-Functional Requirements

-NFR0: Current and accurate locations of users will need to be kept up to date as they move and change locations.

-NFR1: User reviews and ratings of others

-NFR2: Users will only be shown services available in their immediate area by default

-NFR3: Relevant information about the service a user has selected will be shown in less than 10 seconds

-NFR4: Users will be prompted to ask if they want to write a review for a driver after the ride happens

5. Scenarios
   a. Customers: Carter Gibb
      i. Location Service:
         ● **Initial Assumption:** The customer is logged in and can interact with the site. Home page is a local map displaying themself and nearby active drivers
         ● **Normal:** The user will look for an active driver near them and select them, moving to making a request
         ● **What Can Go Wrong:** The user could select the wrong driver or decide against the one they selected, so a back button will be provided to return to home page
         ● **Other Activities:** The user can press refresh to update the locations of them and any nearby drivers
         ● **System State on Completion:** There will be a driver's information displayed and the user can decide whether or not to request a ride

      ii. Ratings and Review
         ● **Initial Assumption:** The customers has logged in and can view their profile and others profiles and request service
         ● **Normal:** The users can view ratings and create ratings/reviews of their own and respond to others reviews
         ● **What Can Go Wrong:** The users could leave a rating/review for the wrong person without meaning to, a user can delete a comment or rating of theirs if needed
         ● **Other Activities:** A user can look at extended reviews such as viewing a response made to another comment and the response to that etc..
         ● **System State on Completion:** A new review will be left and added to the database for that account

      iii. Report System
         ● **Initial Assumption:** A user is logged in and can interact with the page and view ratings/reviews and request services
         ● **Normal:** The user can interact with a report button for drivers/customers and be given a small popup allowing further details of the report and the report will then be sent
         ● **What Can Go Wrong:** Users could report the wrong person or the wrong comment/review or send it too early without providing reason/details. Reports will be stored and can be viewed/updated/or deleted
         ● **Other Activities:** Users can view the current stage of the report (needs to be reviewed, being reviewed, report complete, etc)
         ● **System State on Completion:** User report will be stored and sent and user will be returned to subsequent page before report

b. Providers: Avery Killian
   i. Location Service
      ● **Initial Assumption:** User can log in to the providers account and interact with the page
      ● **Normal:** User will be able to see active requests near them along with set their account as active or inactive
      ● **What Can Go Wrong:** Users can accept a request they can't do or something can come up that makes them unable to handle the accepted request. Cancellations can be made within reason and excess cancellations will be reviewed
      ● **Other Activities:** Users can see other active providers nearby to ensure no two people accept the same job
      ● **System State on Completion:** Provider will be given location of customer and sent to a separate page with more details

   ii. Ratings and Review
      ● **Initial Assumption:** User is logged in, can interact with page, and request services
      ● **Normal:** User can view their own ratings/reviews and others and create ratings/reviews
      ● The users could leave a rating/review for the wrong person without meaning to, a user can delete a comment or rating of theirs if needed
      ● **Other Activities:** A user can look at extended reviews such as viewing a response made to another comment and the response to that etc..
      ● **System State on Completion:** A new review will be left and added to the database for that account

   iii. Report System
      ● **Initial Assumption:** A user is logged in and can interact with the page and view ratings/reviews and request services
      ● **Normal:** The user can interact with a report button for drivers/customers and be given a small popup allowing further details of the report and the report will then be sent
      ● **What Can Go Wrong:** Users could report the wrong person or the wrong comment/review or send it too early without providing reason/details. Reports will be stored and can be viewed/updated/or deleted
      ● **Other Activities:** Users can view the current stage of the report (needs to be reviewed, being reviewed, report complete, etc)
      ● **System State on Completion:** User report will be stored and sent and user will be returned to subsequent page before report

c. SysAdmin: Gia Nguyen
   i. Location Service
      ● **Initial Assumption:** User will be able to see active drivers and their locations
      ● **Normal:** The user will be able to select a driver and view their profile from this menu
      ● **What Can Go Wrong:** A different driver is selected from the intended one, so a button will be available to go back to the location page
      ● **Other Activities:** Navigate to other pages to review driver and customer accounts
      ● **System State on Completion:** A driver or page will be selected to view

   ii. Ratings and Review
      ● **Initial Assumption:** Users will be able to view ratings on both customers and drivers and remove them as necessary
      ● **Normal:** A user will remove reviews that are problematic for any reason
      ● **What Can Go Wrong:** A review may be accidentally removed, a confirmation box will be added to make sure the decision to remove it was intentional
      ● **Other Activities:** Navigate to another customer or provider to read the reviews associated with them
      ● **System State on Completion:** Selected review will be removed and other reviews will again be available to view

   iii. Report System
      ● **Initial Assumption:** Admin can view active reports and get notifications for new reports coming in
      ● **Normal:** Admin will view reports and details provided, and view history/account of the reported user
      ● **What Can Go Wrong:** Admin could dismiss reports by accident or punish the wrong accounts. History will be kept and database of reports can be adjusted within certain amount of time
      ● **Other Activities:** Navigate to accounts associated with reports or move to other pages to review services
      ● **System State on Completion:** Report will be completed and added to a separate temporary database as completed and listing the punishments applied.