

Cab booking application

Working:

- There are 2 types of user(customer and driver) . Each user have to register in order to login to the application. We check for the valid credentials when user tries to login.
- Driver has to login and turn on the availability toggle in order to receive rides from the queue.
- Customer can book a ride only if driver has turned on available toggle button. Fills the ride details in the form and submits the ride.
- On accepting the ride, the driver will have to verify the customer by looking at his details.
- On successful verification, driver can start the ride.
- When he reaches the destination, he receives pop up saying he reached destination.
- When verification fails, the ride will be cancelled. Customer has to book new ride.
- When driver rejects the ride, he will be assigned the next ride on the queue until rides are available on queue.

Driver:

Functions :

1. Available / Un-Available Toggle Button:

- Driver has option to make himself available / Un-available to accept rides.
- On Un-available he will not be able to accept any rides that customer has requested from available rides button.
- On Available he can receive the rides when clicked on available rides button.

2. Available ride Button:

- When driver clicks this button. He can receive the rides that customer has requested. If no ride available then a pop up appears saying **“no rides available “**.
- When he click this button and if rides are available, then a window appears with ride details which includes pick-up location, ride-id etc..
- Driver has 2 options i.e. accept / reject ride
- On rejecting he will receive the next ride available automatically until the rides availability is zero.

- On accepting the ride. He starts heading towards the pick-up location. When he is near the pick-up location / reached the pickup location he is notified that he reached the pick up location. And he confirms that by clicking the reached location. As soon as he says he reached location, a notification is sent to customer that **driver is at pick-up location**.
3. Verify Customer Button:
- On clicking this button, details of the ride and customer window appears with verified and not-verified buttons.
 - On clicking verified button, a notification sent saying **verification successful**.
 - On successful verification, A new window appears with destination details and other user details with start ride button.
 - When driver clicks the start ride button, the ride is started. After reaching the destination driver is notified saying he reached destination. The ride is completed at this point.
 - On verification failure, the ride is cancelled and notification sent to customer.
4. Ride History button:
- When driver clicks this button, all his past completed, verification failed rides are listed here.

Rules implemented on Driver:

- Driver can accept rides only by making himself available.
- He can accept only one ride at a time. And can accept next ride on completion of on-going ride.
- History won't show anything if there are no completed or verification failed rides under him.
- He cannot accept the ride which he had rejected before. Only new ride are showed to driver.

Customer:

Functions:

1. Book a Ride Button:
- Customer can book a ride if at least one driver has made him-self available. Or else it won't allow user to book a ride.
 - On available drivers and clicking the above button, a new window appears to fill up the ride details.
 - On submitting the ride. It takes back to the main window.

2. Ride History Button :

- On clicking this button, all the past completed and verification failed rides booked by that particular user appears on the window.
- If no rides were completed or failed in verification then it say no history available.

3. Ride Status:

- It displays the status of the current ride. i.e. Accept status if driver has accepted the ride but not yet verified, Running status if driver accepted and verified customer and started the ride.
- Once ride is completed , on clicking Ride status button it shows that there is no current ride to show status.

4. Repeat Ride:

- On clicking the above button, a list of all destinations where the customer has travelled will appear in an window. And a repeat ride button appears at the bottom.
- Customer can select the destination he want to travel again and click on repeat ride button.
- On click the repeat ride button, a new ride form window appears with previous data auto-filled in the ride form. User can change any required field accordingly and submit the ride. After submission of ride, the same procedure is followed as in case of book a ride functionality.

Rules implemented on Customer:

- Customer can book a ride only if driver is available.
- Customer can book only one ride at a time. Only after completion or verification-failed or no driver accepted any ride. Then he can go for another ride request.
- History won't show anything if there are no completed or verification failed rides under him.
- On submitting ride requisition form, Customer will be made to wait for 30 secs in this code to allow driver to accept ride if not ride will be cancelled and notifies customer that no drivers found.
- If there are no completed rides under that customer then repeat ride window doesn't display anything.

Login Page:

- User is asked to enter the username and password.
- On valid credentials, user is navigated to respective screens(Customer / Driver)
- On invalid credentials, it notifies user that its wrong credentials.

To be Implemented:

1. Customer can update the location twice max while ride is running.
2. Show ETA on the ride status window
3. Create a button to get the receipts of previous rides
4. On completion of ride show the total cost of the ride
5. Add payment details to the ride form
6. Validate payment details
7. More number of ride rejections, lower the chances of getting a ride.
8. On failing the verification customer cannot book a ride for next 24 hrs and 25 % of the total amount will be deducted.
9. For emergency, veteran ride no cost will be charged.
10. User can book cab during time 9am – 9pm Monday – Saturday
11. During emergency reasons(e.g. health) 24 hours any day
12. Distance for veterans to travel from place to place does matter (i.e. with-in 20 miles) with no cost
13. Other rides any place any distance at the cost of \$5 per mile
14. Cancellation charges(Regular rides 40% of the total cost, veterans no cancellation charge but not able to book any free ride for the next 1 week)
15. Waiting cost (5 mins after the time of arrival \$2 per min)
16. Any stops in between the travel (waiting cost- \$2 per min)
17. One person with veteran is no cost. Any extra person with them is asked to pay the actual ride cost.
18. Timer starts once the driver reaches the pick-up location(just to keep the wait period recorded) and ends after reaching the destination.
19. Maximum 1 luggage allowed per person.
20. Any extra luggage \$2 cost.
21. Same cost for 2 people for the same destination. Any extra customer 25% more than the actual cost for the ride.
22. On reaching the pickup location timer starts.(After 2mins for regular ride , 5 mins for veterans) waiting cost begin
23. Cancel Ride functionality

Ride Assignment Rules:

1. Rider with less number of rejections first
2. Next Rider with no on-going ride
3. Rider whose time to reach destination is less

