CU Night Ride Part 4

Team Members

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Summary of work

1. What features were implemented?

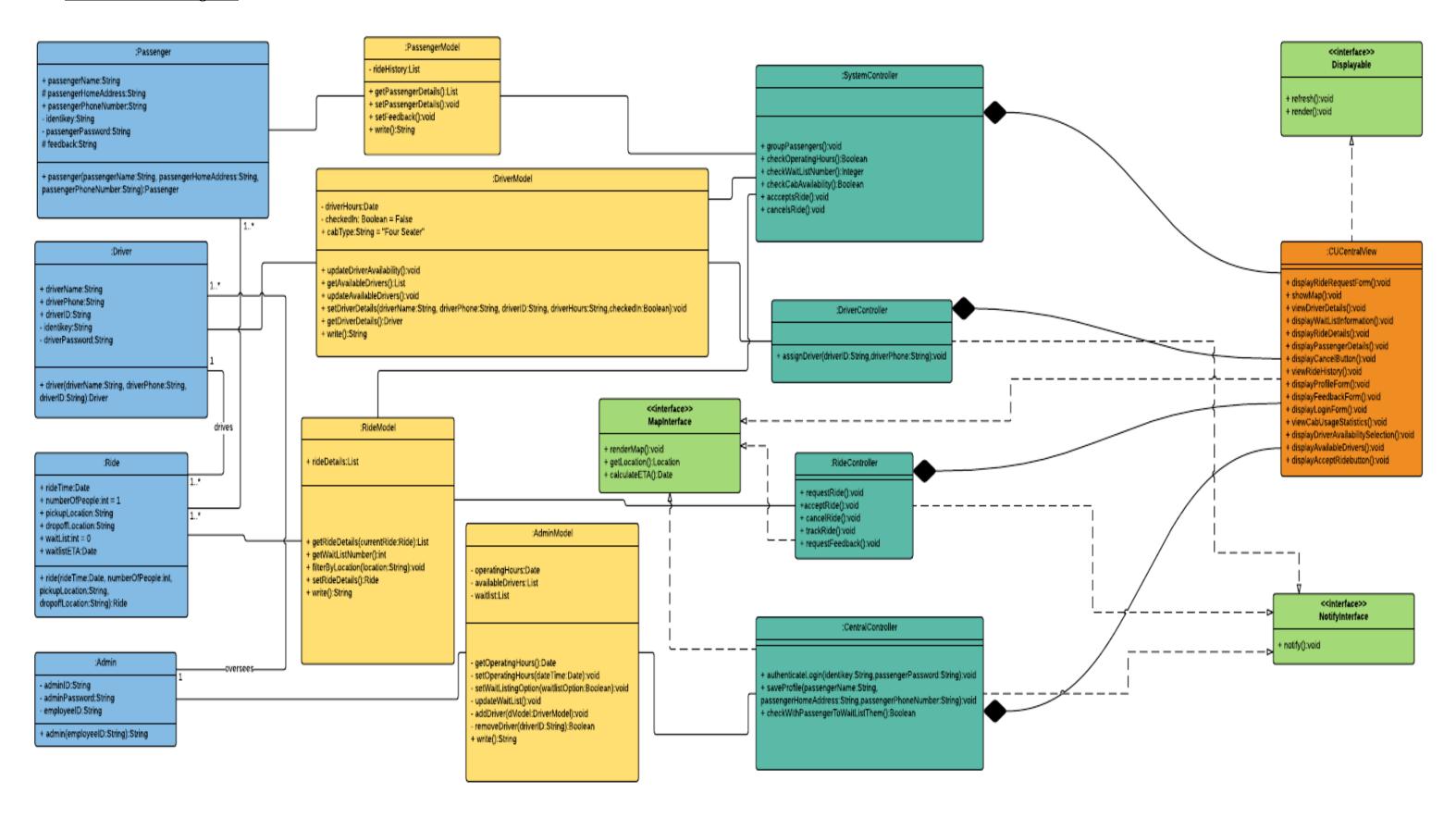
- a. Passengers being able to requesting a ride
- b. Passengers being able to choose ride details from history.
- c. Ability to waitlist the passengers
- d. Send notification to the passengers to
- e. Driver being able to accept rides
- f. Driver being able to see the location of the passengers and after pick up see the destination.

2. What features were not implemented?

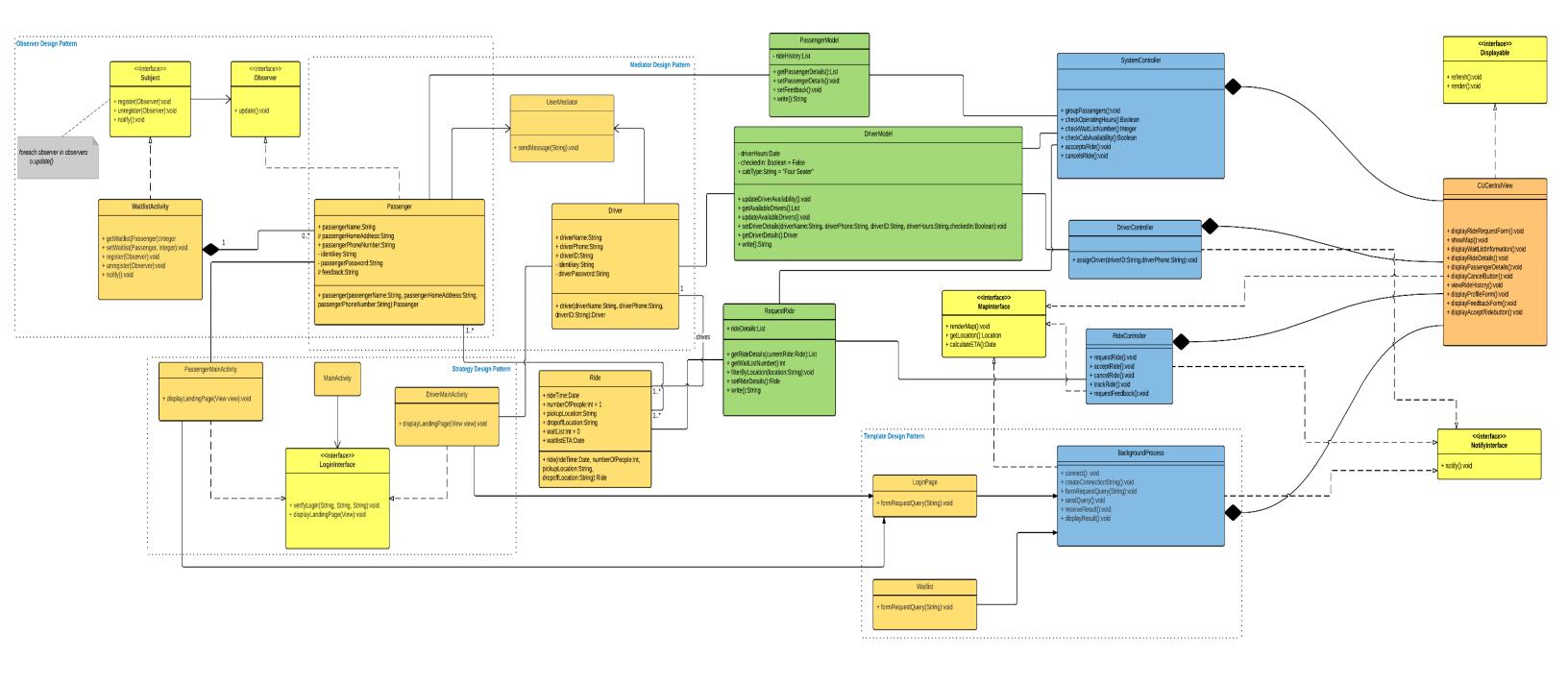
- a. Admin panel
- b. Restricting the waitlist's capacity to 10 people.
- c. Directions in map activity
- d. Setting a waitlist timer.

3. Class Diagrams

Part 2 Class Diagram



Part 3 Class Diagram



4. Did you make use of any design patterns in the implementation of your final prototype? If so, how? If not, where could you make use of design patterns in your system?

We used the following design patterns

- Observer To notify everyone in the waitlist if there is a change in their waitlist number.
- Strategy To display different landing pages according to the type of the user.
- Mediator Communication between different user types go through the mediator class.

We are thinking of using the following design patterns

- Template To vary just the connection string when connecting to the database. The usual steps are **createConnectionString**, **formQuery**, **sendQuery**, **receiveResult and displayResult**. There are different queries for different functions and hence just the **formQuery** will change.
- Iterator Iterate through ride history
- State To show user and driver states **User** ->_(ASSIGNED_TO_CAB, WAITLISTED, DROPPED OFF) <u>Driver</u> -> (CLOKED_OUT, CLOCKED_IN, READY_FOR_PICKUP, DRIVING)
- Decorator Maps
- 5. What have you learned about the process of analysis and design now that you have stepped through the process to create, design and implement a system?
 - The process helped us think of more requirements/features.
 - It helped us streamline the development.
 - Design patterns helped us solve certain problems we had. We had to search for design patterns other than what was taught and it was good to learn about design patterns.
 - Designing helped us refine our code and remove confusions.