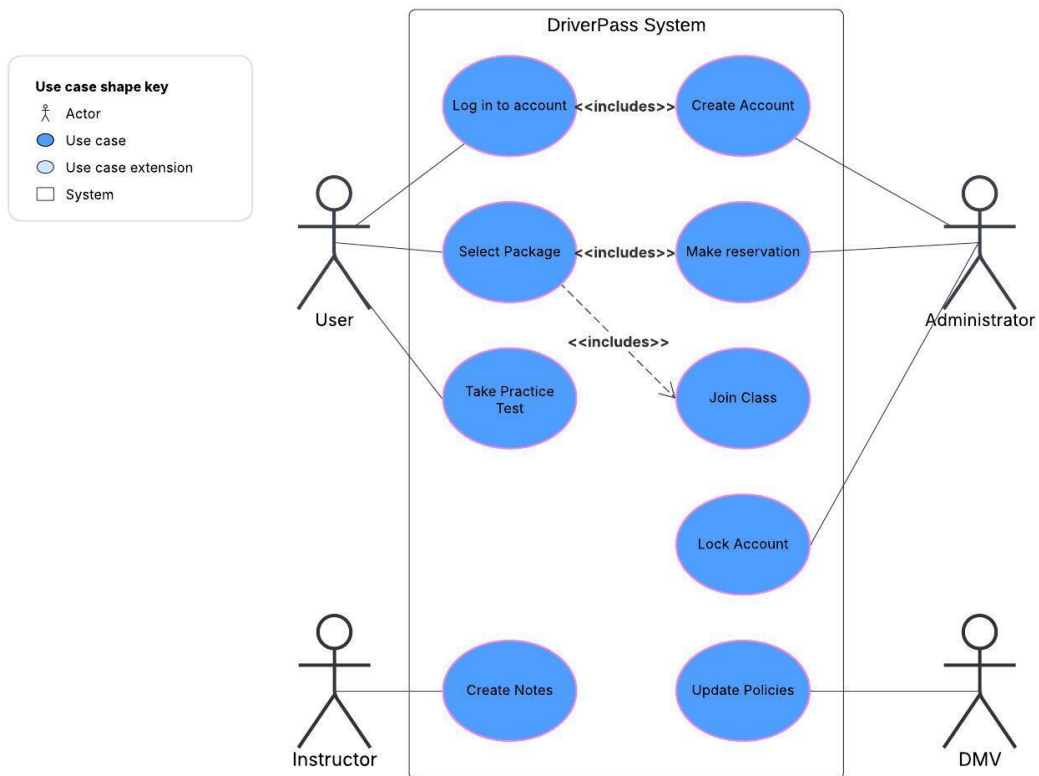


## CS 255 System Design Document

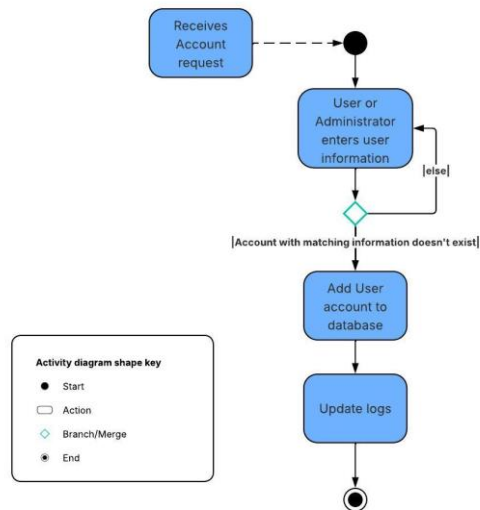
### UML Diagrams

#### UML Use Case Diagram

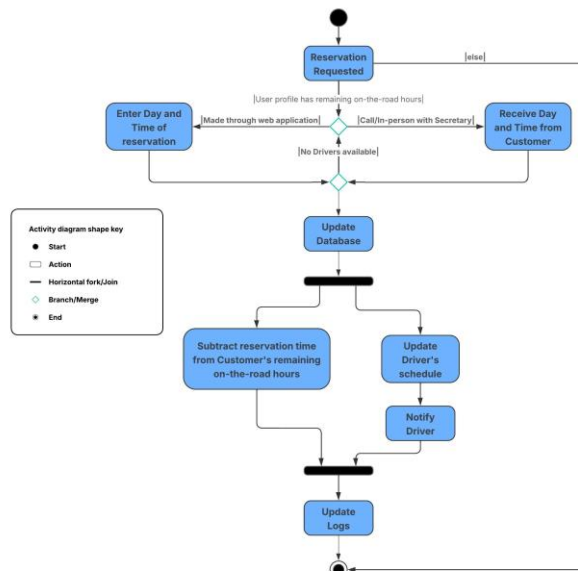


## UML Activity Diagrams

### Creating User Account

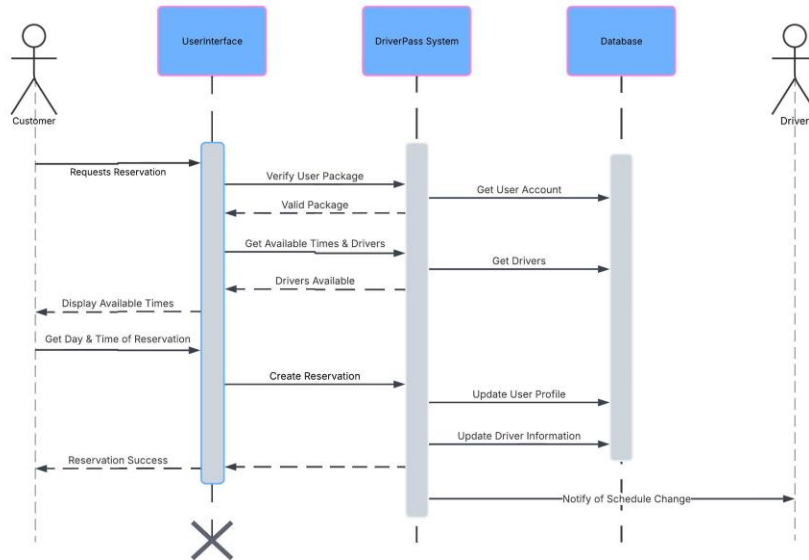


### Making On-the-road Reservations

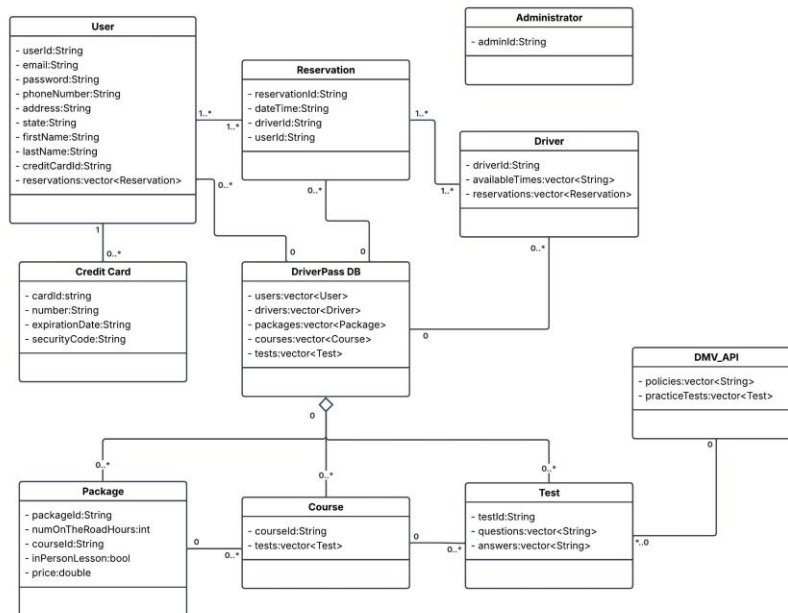


## UML Sequence Diagram

### Making On-the-road reservations (Customer)



## UML Class Diagram





## Technical Requirements

- Hardware
  - Large amounts of hard drive storage aren't necessary because the system operates on a cloud-based platform, but some will be needed for storing files related to testing and development like source code
  - Devices for developing code
- Software
  - IDE or other programming software for developing and testing the system's code
  - Web-based clients for user and administrator interfaces
  - Interface that allows drivers to leave comments on specific on-the-road sessions
- Infrastructure
  - While the DriverPass database can be stored on the cloud, its structure must be defined
    - User, Driver, Reservation, Test, Course, Package, and so on
  - API for receiving and handling DMV updates
  - Encryption and decryption strategies for securely storing sensitive user information like passwords and credit card details
  - Security notifications and logs for tracking suspicious behavior
  - Automatic updating of reservations times and statuses
  - Version control like GitHub
- Other
  - Cloud development license