# CS 255 DriverPass System Design Document

## UML Diagrams

### UML Use Case Diagram

A diagram of a diagram

Description automatically generated

### UML Activity Diagrams

A diagram of a process

Description automatically generated

A diagram of a flowchart

Description automatically generated

### UML Sequence Diagram

A diagram of a user flow

Description automatically generated

### UML Class Diagram

A screenshot of a computer diagram

Description automatically generated

## Technical Requirements

The DriverPass system will be based within the cloud meaning that it will utilize a third-party service such as AWS or Amazon Web Services or Microsoft Azure which both account for purchasing both a cloud server and database. Since the foundation will be cloud based, DriverPass won’t be accountable for maintenance of any physical hardware. The cloud service also accounts for scalability by actively accounting for space and performance as needed since DriverPass has potential to grow quickly. The cloud database mentioned before will be accountable for holding vital information along the lines of customer information, appointment reservations, etc. User authentication and validation to the server/database can be handled utilizing REST API which are a set of rules that handle a secure way for data encryption across the web. As for the remainder of the infrastructure which can be handled in a variety of languages such as Python, Ruby, Java, or JavaScript as they are all compatible with REST APIs and thus recommend it comes down to developer preferences and experience. Since the system will be running within the cloud environment and can be enabled to run 24/7 365 days a year users will have access whenever they need it.