# CS 255 System Design Document

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## UML Diagrams

### UML Use Case Diagram

A diagram of a use case diagram

AI-generated content may be incorrect.

### UML Activity Diagrams

### A diagram of a process AI-generated content may be incorrect.

### A diagram of a payment method AI-generated content may be incorrect.

### UML Sequence Diagram

*A diagram of a driving appointment

AI-generated content may be incorrect.*

### UML Class Diagram

A diagram of a computer

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## Technical Requirements

Hardware requirements for this system should be very basic. All that should be needed is for the DriverPass offices to have computer terminals for their various employees. Should they offer on-site testing, then some terminals for public student use. Since the system will be hosted on a third-party server, there will be no other needed hardware.

Software required could include options such as the following. Supabase is a simple choice for SQL database and authentication protocols. Stripe is a well-established and secure payment service. Calendly is a popular scheduling service that can assist in scheduling the driving slots.

Most needed tools for server maintenance, logging or security should be included in the Supabase and Stripe existing systems. Perhaps we will need to add a web hosting service as well.

One final service we may investigate might be CloudFlare, for added security and data rate limiting. This may also be a requirement for connecting with the DMV servers. We also need to secure an agreement with the local DMV to be sure we have a linkable API to their server or at least their rule set. Otherwise, it will be the responsibility of an employee to manually update the courses based on the rules posted on the DMV’s sites.