# CS 255 System Design Document

## UML Diagrams

### UML Use Case Diagram

*A diagram of a driver pass system

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A diagram of a login

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### UML Activity Diagrams

A diagram of a payment method

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### UML Sequence Diagram

*A diagram with orange squares and black text

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### UML Class Diagram

A diagram with text and images

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## Technical Requirements

The technical requirements for the proposed system encompass several key aspects. Hardware requirements include a web-based architecture to ensure universal access, necessitating robust server infrastructure. Software specifications call for web-based development, multiple databases for user accounts and appointments, real-time updates, and a focus on browser compatibility. The system's tools and infrastructure must support user authentication with stringent password criteria, account locking, and password reset options. Role-based access control is essential, allowing administrators to manage appointments and user accounts, while customers can oversee their account settings and appointments. The system should also monitor and present user progress in a user-friendly format and confirm customer purchases through email notifications. Adaptability is crucial, enabling users to modify account settings, and considering potential adaptations to browser updates. Security measures should employ secure user authentication methods. Lastly, the system's assumptions include user familiarity with web-based services and internet access, while its limitations involve dependency on continuous power and potential communication issues for users without internet access.