# CS 255 System Design Document Template

## UML Diagrams

### UML Use Case Diagram

A diagram of a driver pass

Description automatically generated

### UML Activity Diagrams

*Booking appointment sequence*

*A diagram of a software process

Description automatically generated*

*Make payment sequence*

*A diagram of a payment method

Description automatically generated*

### UML Sequence Diagram

*Boking appointment sequence*

*A diagram of a software application

Description automatically generated with medium confidence*

### UML Class Diagram

A diagram of a computer program

Description automatically generated with medium confidence

## Technical Requirements

Starting with my diagrams technical requirements needed will be:

1. Servers:

* Account service servers to handle user authentication and account management.
* Package selection service server to manage package availability and selection.
* Appointment booking service to handle appointment and scheduling and management.
* Payment processing server to process payments securely.

1. Software:

* Database management for the database server such as an SQL.
* Authentication software for secure login and user verification.
* Scheduling software for managing appointments.
* Payment Gateway to process payments securely.

1. Tools:

* UML tools will be needed to create and manage sequence diagrams.
* Version control systems will also be needed to manage code versions.

1. Infrastructure:

* Network infrastructure to ensure secure and reliable communication between services.
* Cloud-based infrastructure for scalability and reliability.
* Security measures to protect data and ensure secure transactions.