# CS 255 System Design Document Template

## UML Diagrams

### UML Use Case Diagram

*A picture containing diagram, circle, line, design

Description automatically generated*

### UML Activity Diagrams

*A picture containing text, diagram, sketch, technical drawing

Description automatically generated*

*A picture containing text, diagram, plan, screenshot

Description automatically generated*

### UML Sequence Diagram

*A screenshot of a diagram

Description automatically generated with medium confidence*

*Diagram assumes all user’s input is valid*

### UML Class Diagram

*A picture containing text, diagram, parallel, plan

Description automatically generated*

## Technical Requirements

* The system must be a web-based application.
* The system must use cloud storage.
* The system must have role-based accessibility.
* The system must use Linux for back-end development.
* The system input must be cap sensitive for security purposes.
* The system must have an automatic error notification sent to the admin when something goes wrong.
* Platform updates will happen automatically.
* The cloud system must handle any data exchange.
* Security must have automatic locking when hacking occurs.
* The system must have an automatic password reset for lost passwords.
* Each user must have a unique username and password.
* The system must allow a student user to select a package that suits their needs.
* The system shall allow a user to view data based on role and/or package.
* The system shall allow a student or secretary to add or adjust a student’s reservations.
* The system shall allow a user to modify information on their own accounts.
* The system shall allow an admin to disable a package if needed.
* The system shall allow a student to take practice exams and online classes.
* The system shall allow a secretary to edit driver notes to students account.