

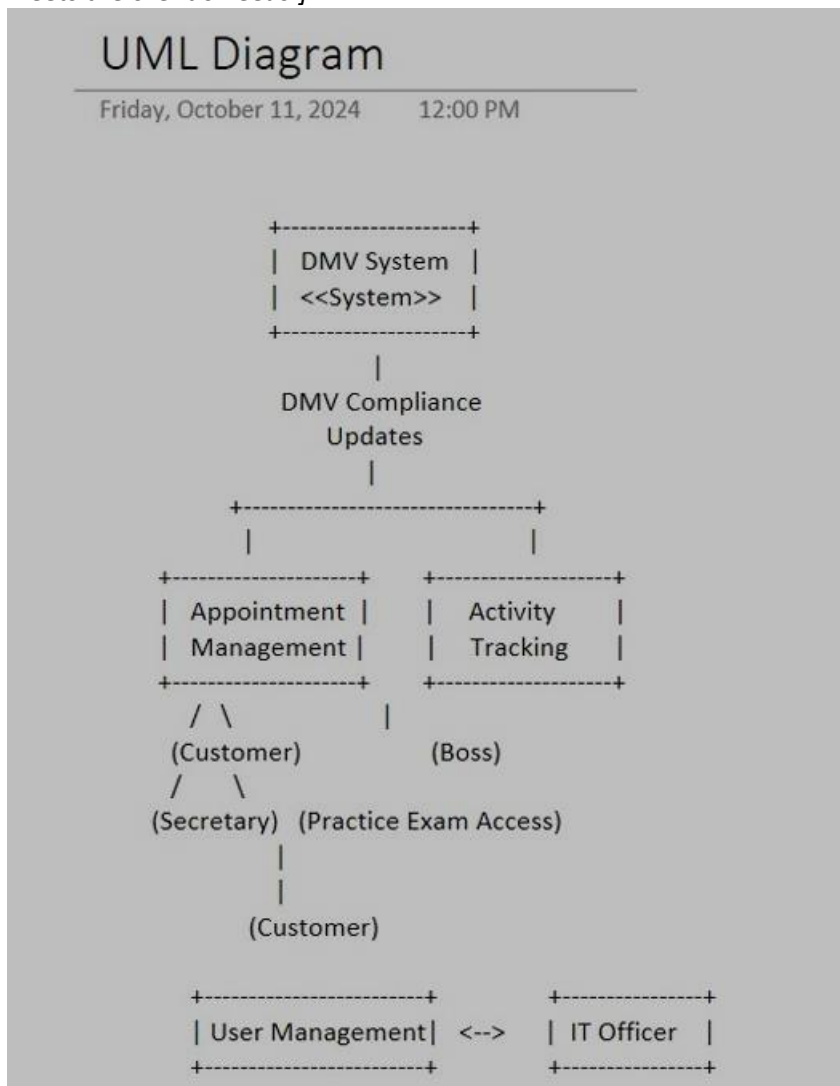
CS 255 System Design Document Template

This template lays out all the different sections that you need to complete for Project Two. Each section has guidance to prompt your thinking. You will need to continually reference the interview transcript as you work to make sure that you are addressing your client's needs. There is no required length for the final document. Instead the goal is to complete each section based on what your client's needs are. Remove this note when you are finished, and replace all bracketed text with the relevant information.

UML Diagrams

UML Use Case Diagram

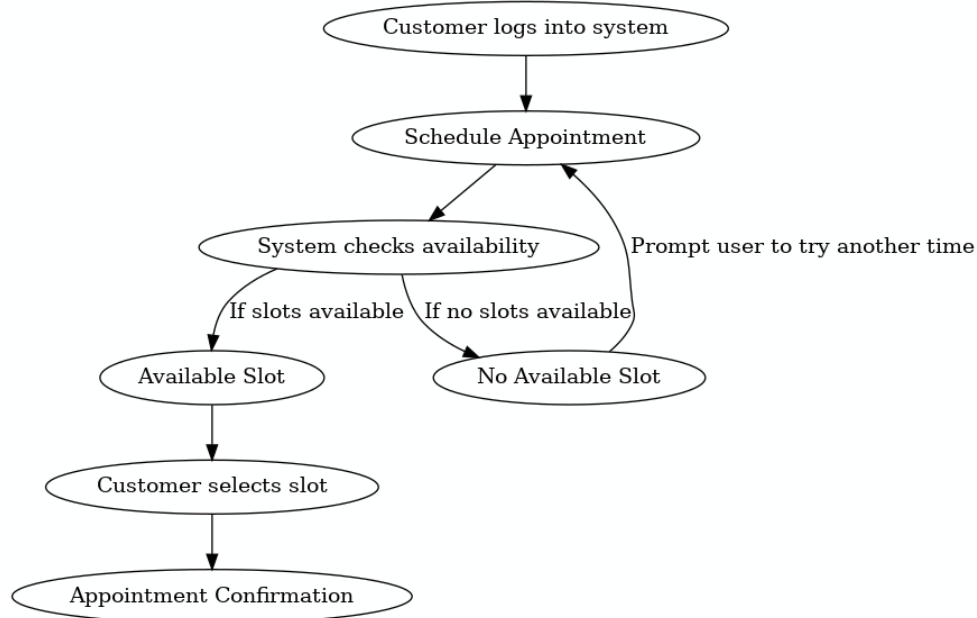
[In Module Six, you were asked to complete a use case diagram based on your system design. If you would like to make any adjustments to your diagram, please do so. Please insert your use case diagram here. Check to make sure that you included appropriate components and symbols and that your design meets the client's needs.]



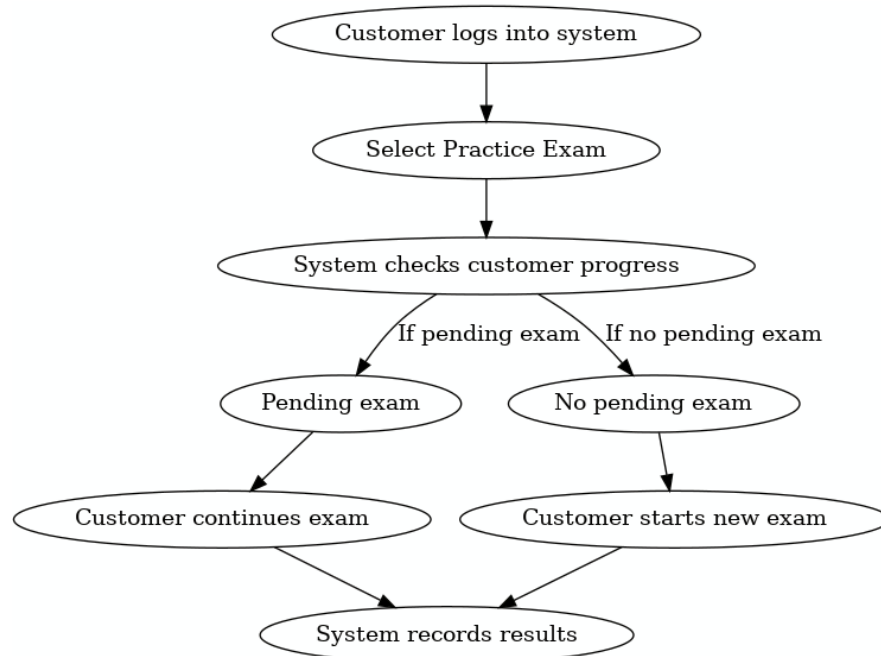
UML Activity Diagrams

[You were asked to choose **two** use cases and create **two** activity diagrams, one for each use case. Please insert **both** of your activity diagrams here. Check to make sure that you included appropriate components and symbols and that your design meets the client's needs.]

Use Case 1 - Appointment Management:



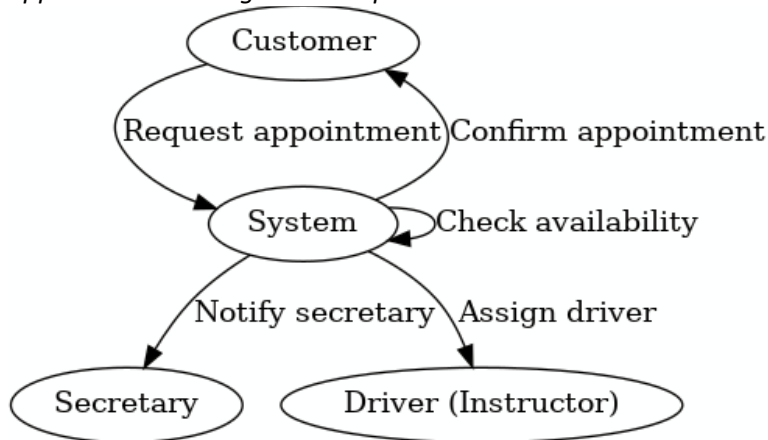
Use Case 2 – Practice Exam Access:



UML Sequence Diagram

[You were asked to create a sequence diagram based on **one** of the use cases you chose. Please insert your sequence diagram here. Check to make sure that you included appropriate components and symbols and that your design meets the client's needs.]

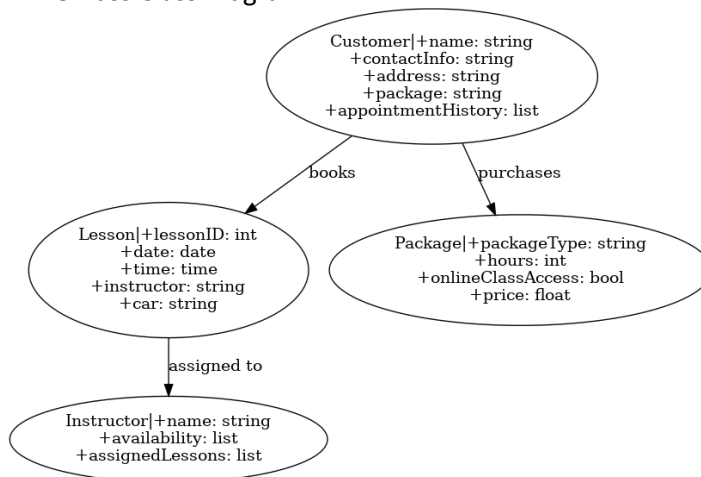
Appointment Management Sequence:



UML Class Diagram

[You were asked to create a class diagram based on the different classes and attributes needed for your system design. You are **not** required to include methods, but you may if you wish. Please insert your class diagram here. Check to make sure that you included appropriate components and symbols and that your design meets the client's requirements.]

DriverPass Class Diagram:



Description:

- **Customer:**
Attributes: Name, Contact Info, Address, Driving Package, Appointment History.
- **Lesson:**

Attributes: Lesson ID, Date, Time, Instructor, Car.

- **Instructor:**

Attributes: Name, Availability, Assigned Lessons.

- **Package:**

Attributes: Package Type, Hours, Online Class Access, Price.

Technical Requirements

[Based on the diagrams you have created, describe the technical requirements of your system. These requirements should address the required hardware, software, tools, and infrastructure necessary for your system design.]

Hardware:

- Cloud-hosted server to store user information, lesson schedules, test results, etc.
- Backup servers to ensure redundancy.

Software:

- **Operating Systems:** Windows, Unix, macOS (for the admin/IT).
- **Browsers:** Chrome, Firefox, Safari (for end-users accessing the web-based platform).
- **Database:** Cloud-hosted relational database (e.g., MySQL or SQL Server) for managing appointments, user details, progress tracking, etc.

Tools:

- **Development Tools:** Lucidchart for system modeling, SQL for database management, web development tools for building the user interface.
- **Security Tools:** SSL/TLS encryption, multi-factor authentication for admin access.

Infrastructure:

- **Web Hosting:** Cloud-based services (e.g., AWS, Azure).
- **User Management:** Role-based access control to manage different user permissions (customers, secretaries, IT officers, etc.).
- **Compliance:** Integration with DMV systems for real-time updates.