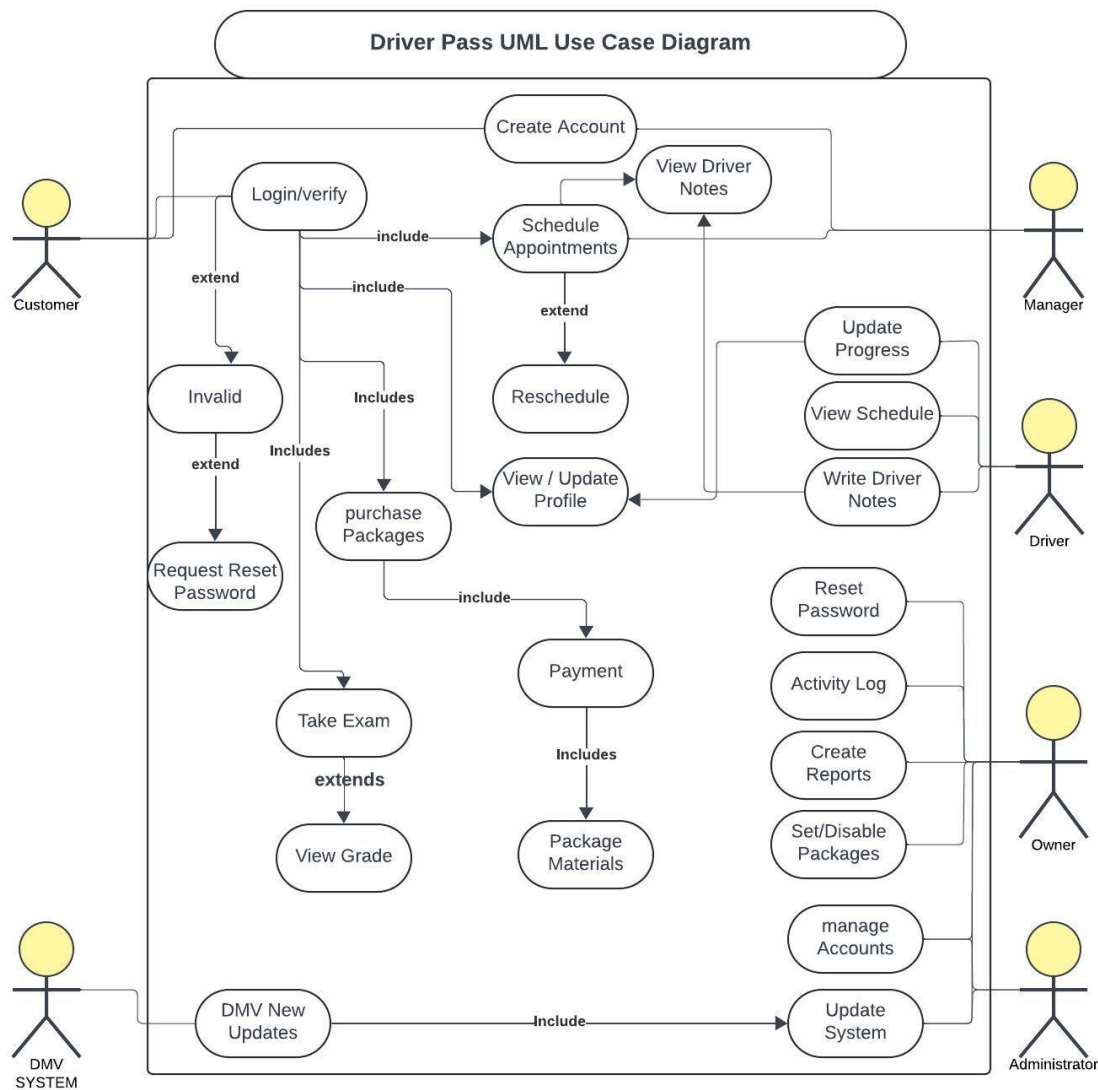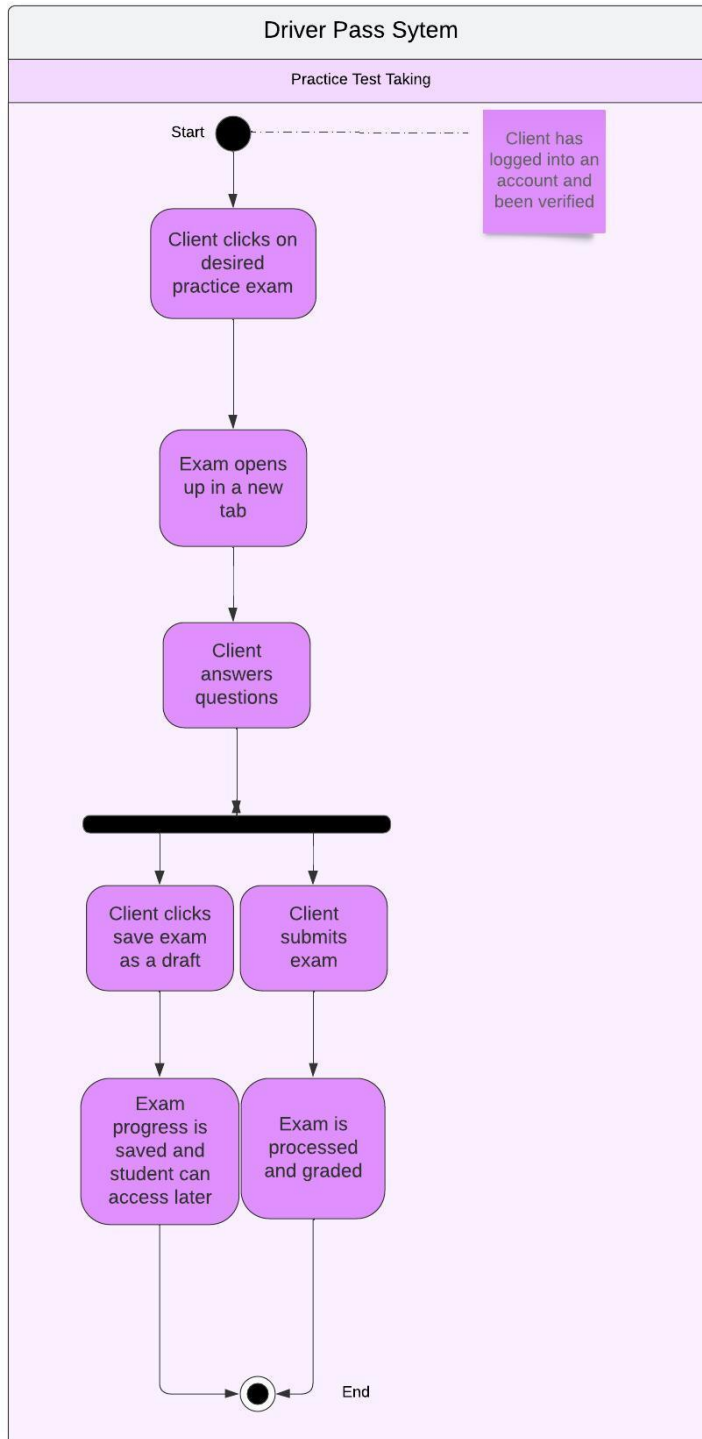# CS 255 System Design Document Template

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.
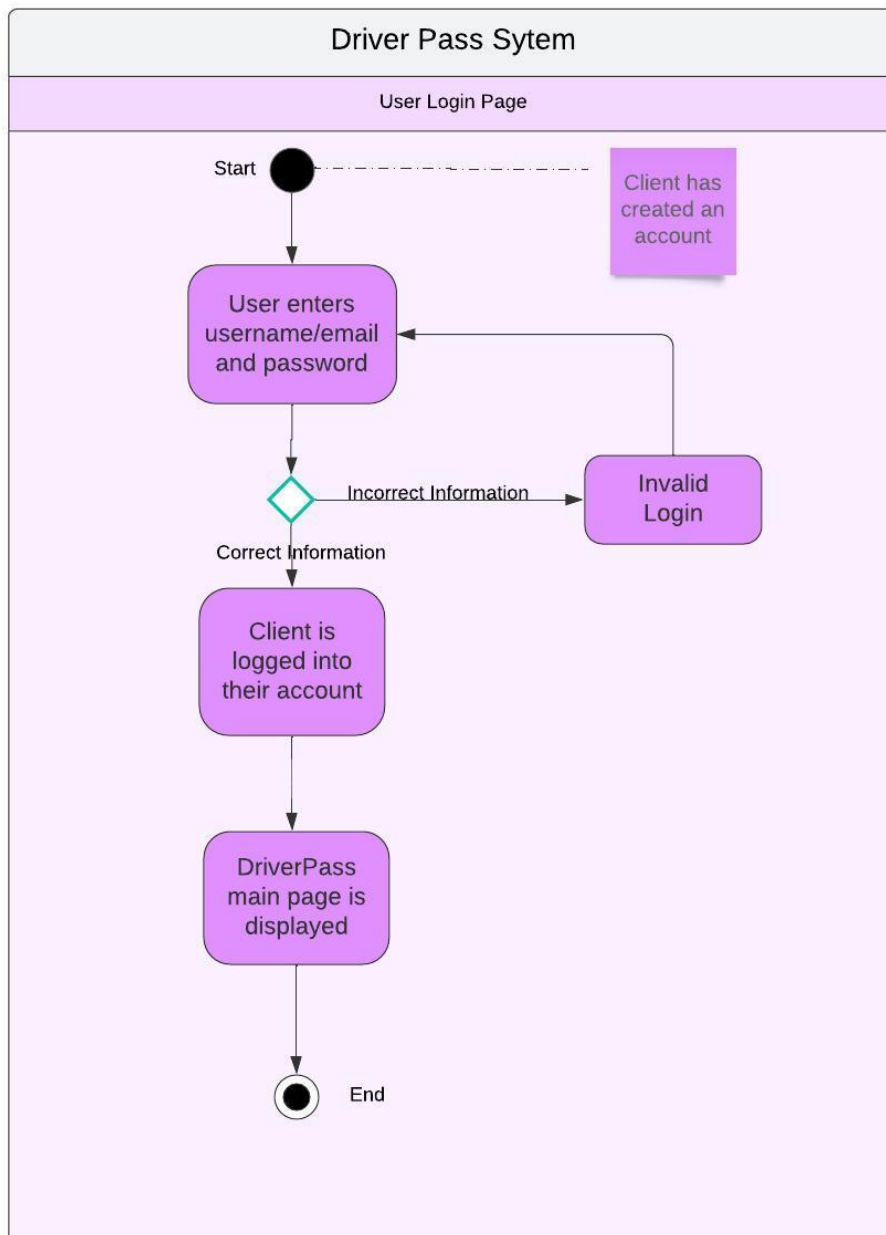
UML Diagrams

UML Use Case Diagram

UML Activity Diagrams

Driver Pass Sytem
Practice Test Taking

Start — Client has logged into an account and been verified

Client clicks on desired practice exam

↓

Exam opens up in a new tab

↓

Client answers questions

↓

Client clicks save exam as a draft | Client submits exam

↓ | ↓

Exam progress is saved and student can access later | Exam is processed and graded

End

UML Sequence Diagram

Sequence diagram shapes

User

Login Page

Login Database

username

password

submit information

send user information

validate username and password

alt

correct inputs

login successful message

send confirmation

incorrect inputs

login failed message,

send rejection

clear input box

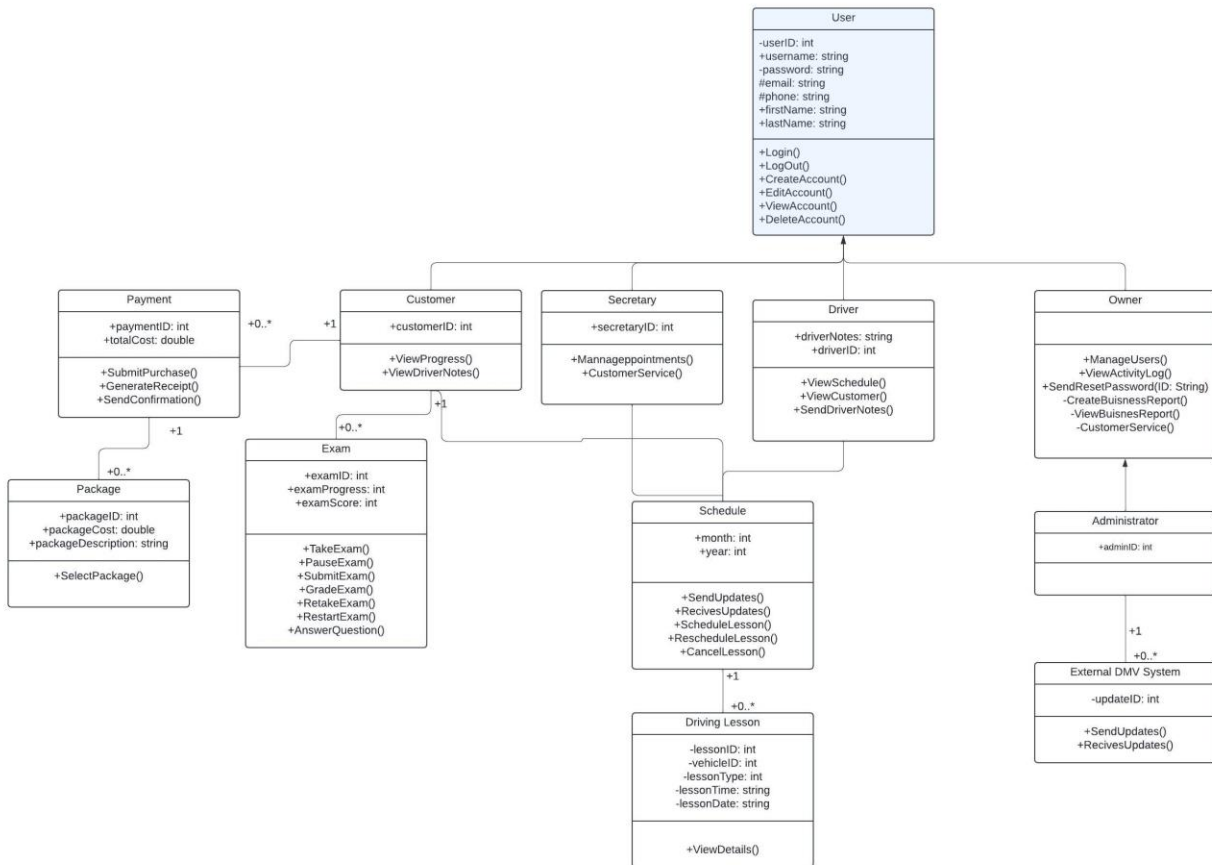**UML Class Diagram**

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:
-Phone, tablet, laptop, or PC

Software:
-Security: multi-factor identification + encrypted passwords. Security software should be up to   date
-Cloud based platform
-Database system to store update reports on data: For the administrator to see data analytic   reports on things like practice tests.
-Accessible through any web browser on any device: safari, chrome, Microsoft edge, etc.
-Scalability: Be able to scale with a growing user base.
-RBAC: Administrators vs. Customers have different roles and accesses when logged into the
        webpage
-Software Updates: For *regular maintenanc*e, every 2-3 months should be enough as the system is not extremely advanced. System maintenance should be an hour and a half at most.

Other:
-Customer Support: Secretary has access to rescheduling customers lessons, as well as

-Integration with DMV System
-Payment API: Makes checkout when buying packages easier