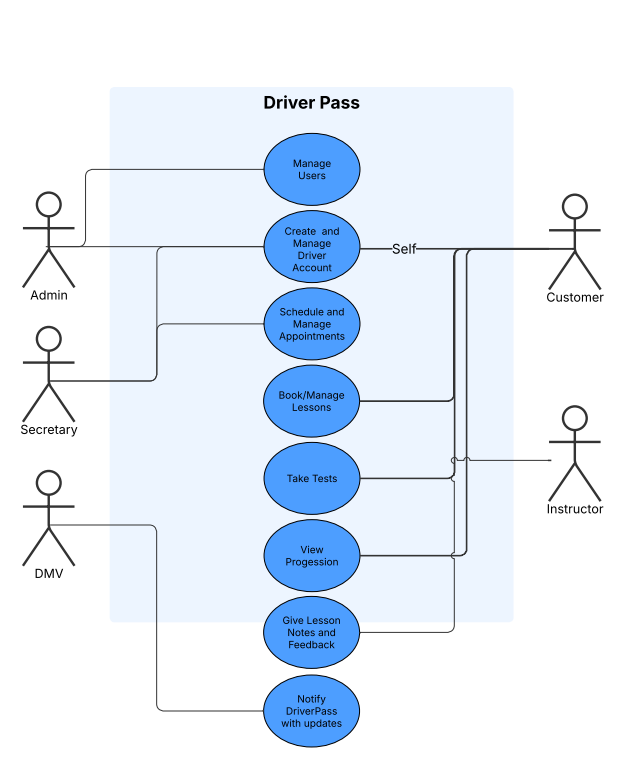
# CS 255 System Design Document Template

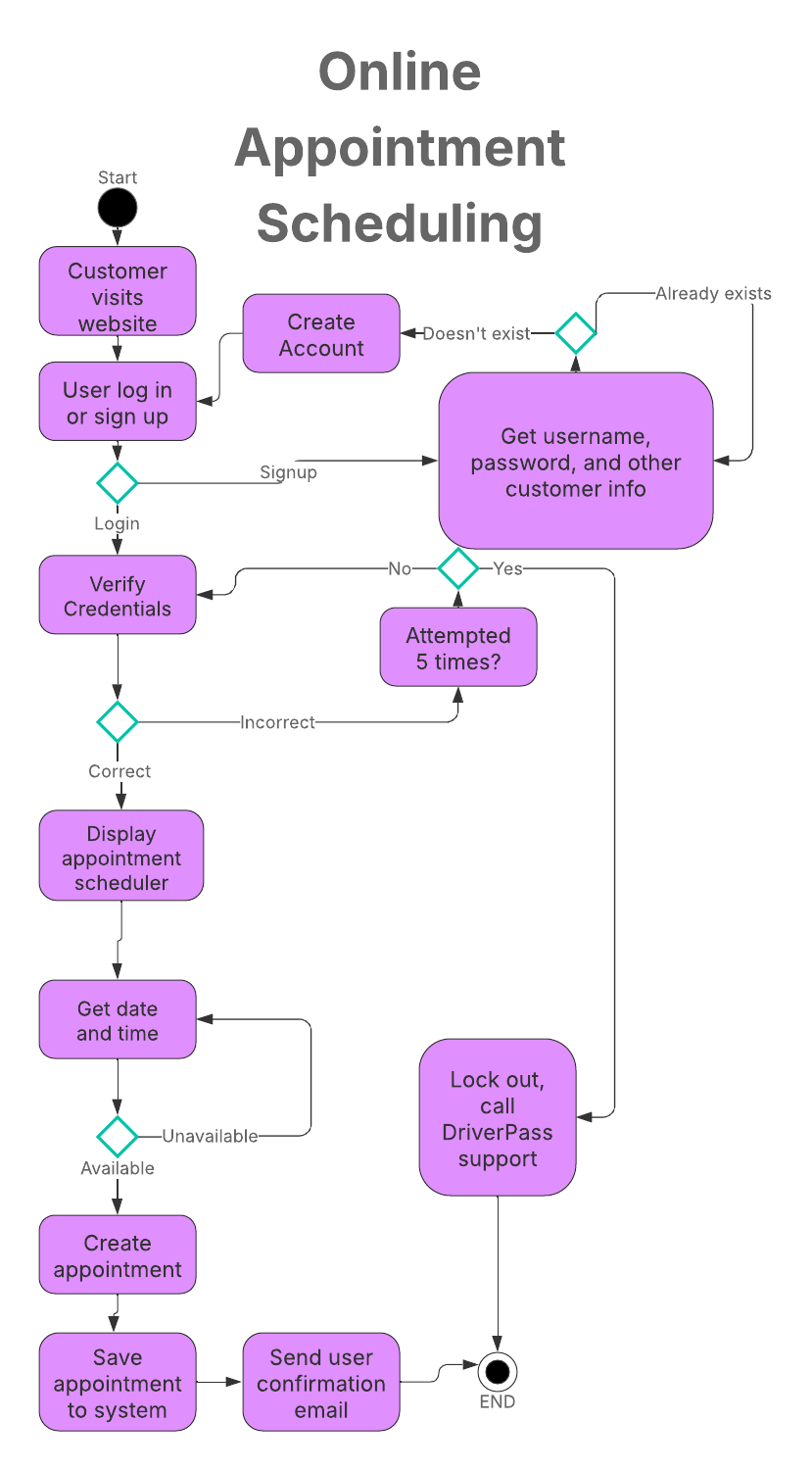
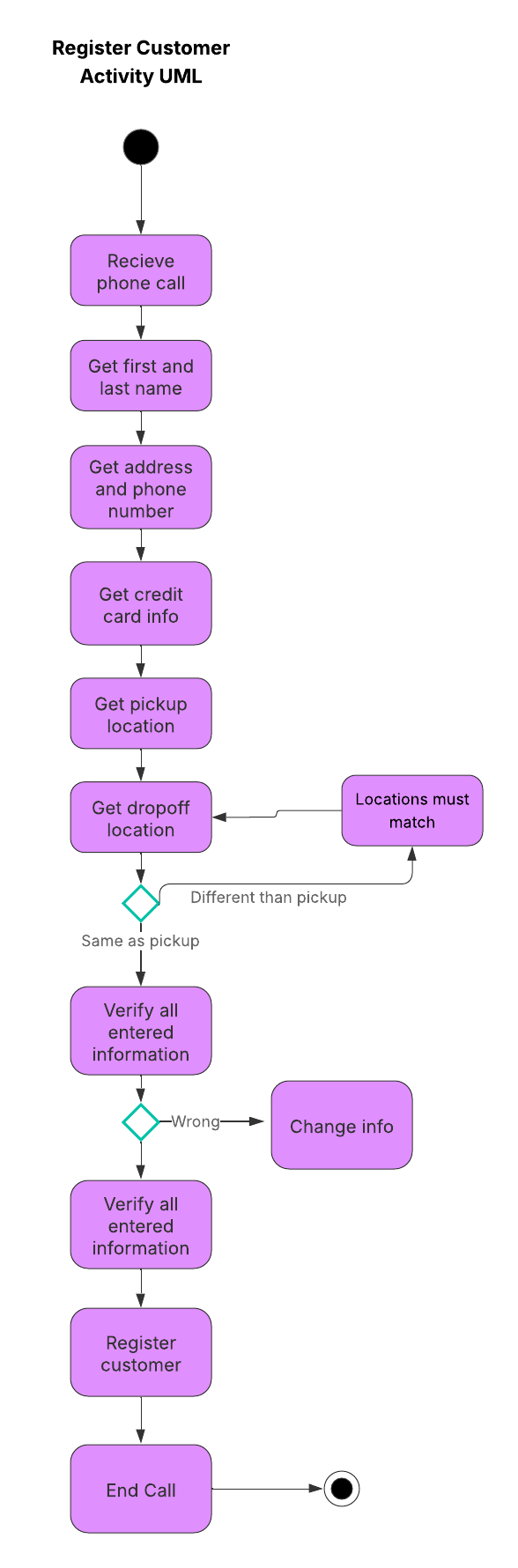
This template lays out all the different sections that you need to complete for Project Two. Each section has guidance to prompt your thinking. You will need to continually reference the interview transcript as you work to make sure that you are addressing your client’s needs. There is no required length 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

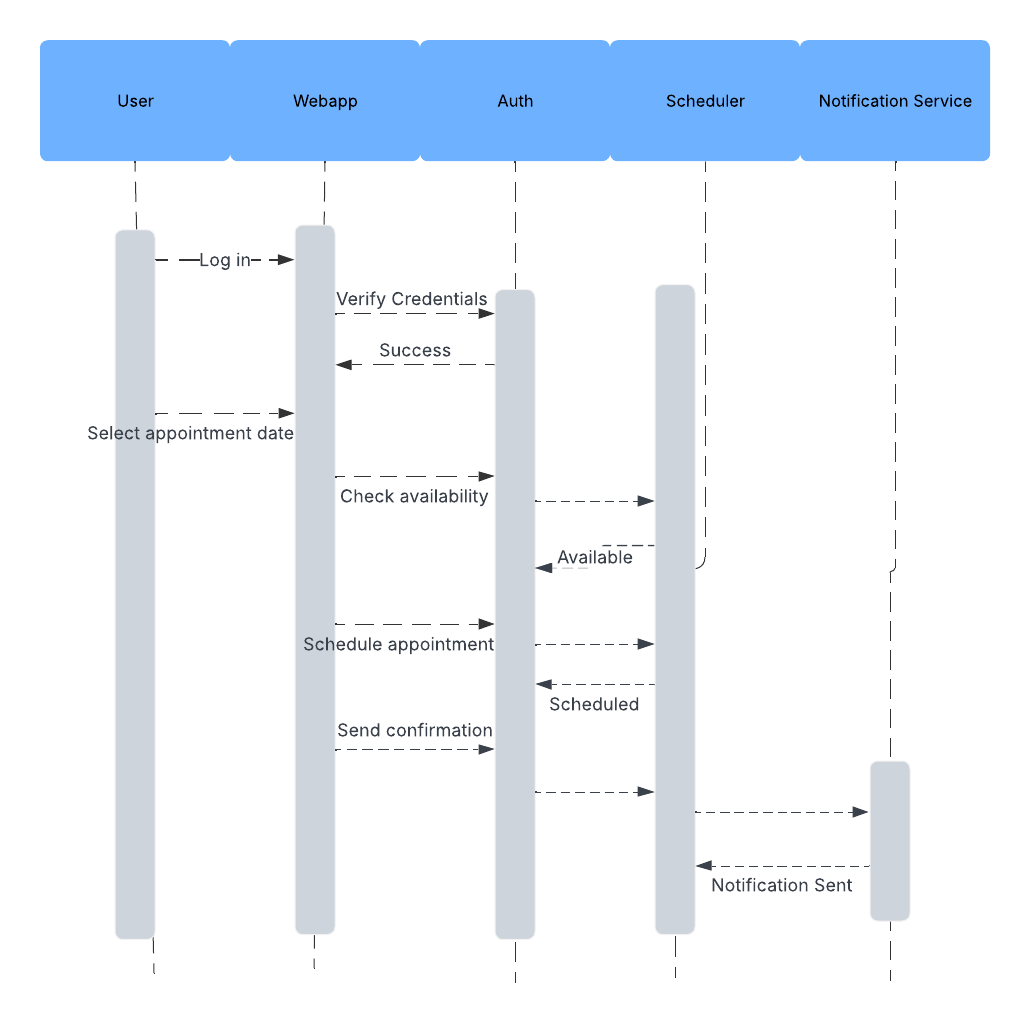


### UML Activity Diagrams

*[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.]*

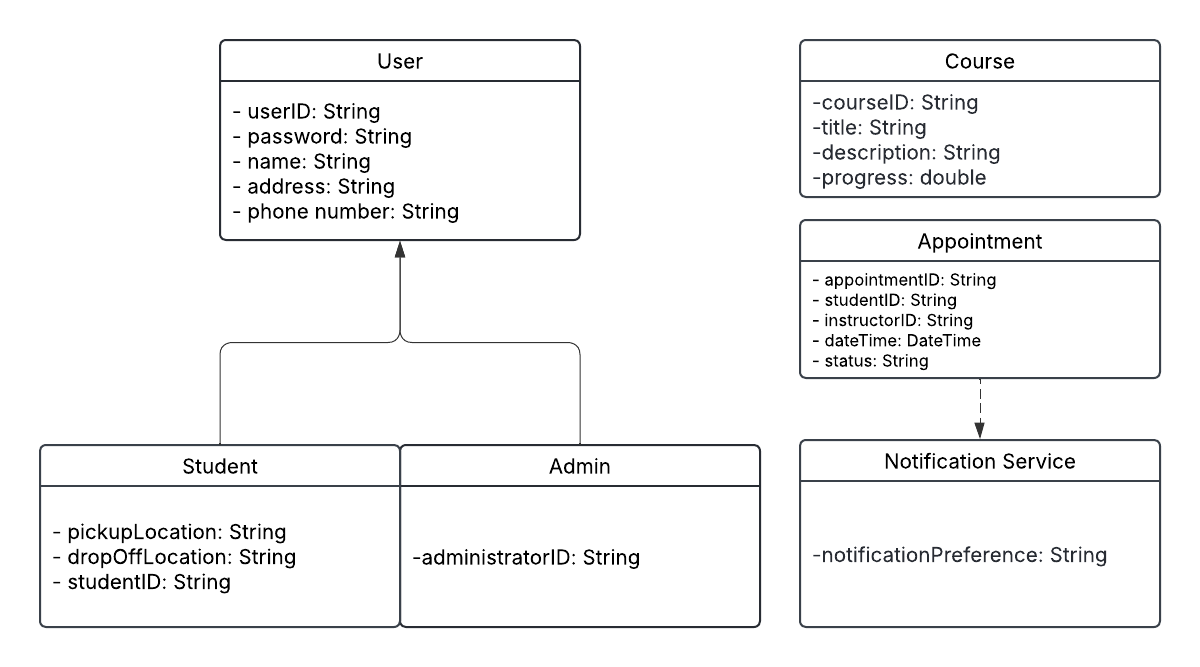
### UML Sequence Diagram

*[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.]*



### 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.]*



## 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:**

* Needs web browser, compatible with mobile devices and computers
* Cloud system integration, hardware handled by cloud provider
* Scalable storage and quick server response time (not too much demand on site at once for now)

**Software:**

* Full stack application that can handle all use cases of driver pass
* Database integration for user information and progress
* Authentication system
* Payment gateway
* Notification service

**Tools:**

* Git for version control
* AWS CloudWatch for log reviews in case of issues
* CI/CD pipeline for testing and deployment

**Infrastructure**:

* Cloud hosting
* Auto scaling if DriverPass gains traffic
* Encryption for PII and other sensitive info
* Backups and Disaster recovery plan
* Compliance with privacy laws for handling personal information and card information