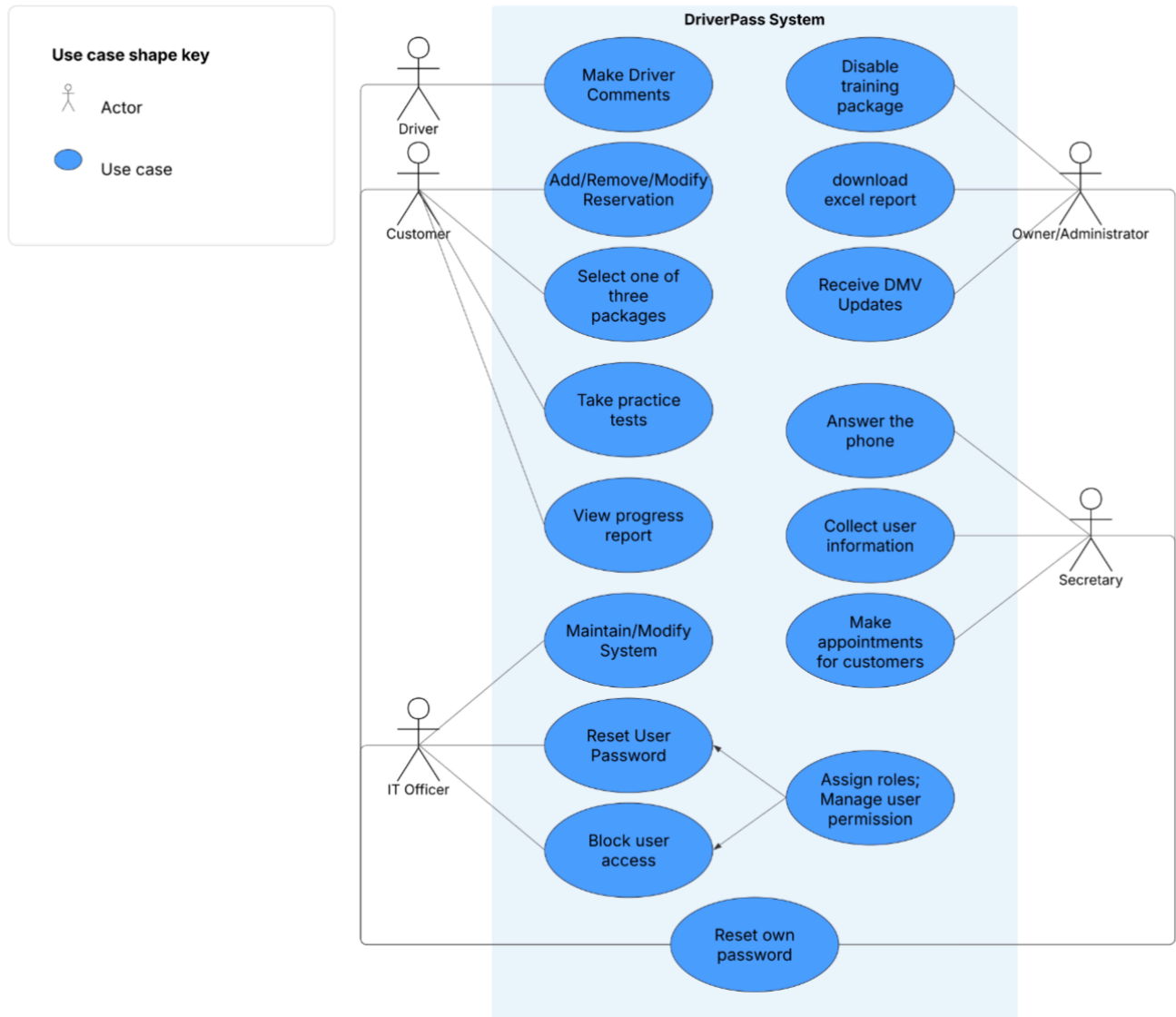


## CS 255 System Design Document

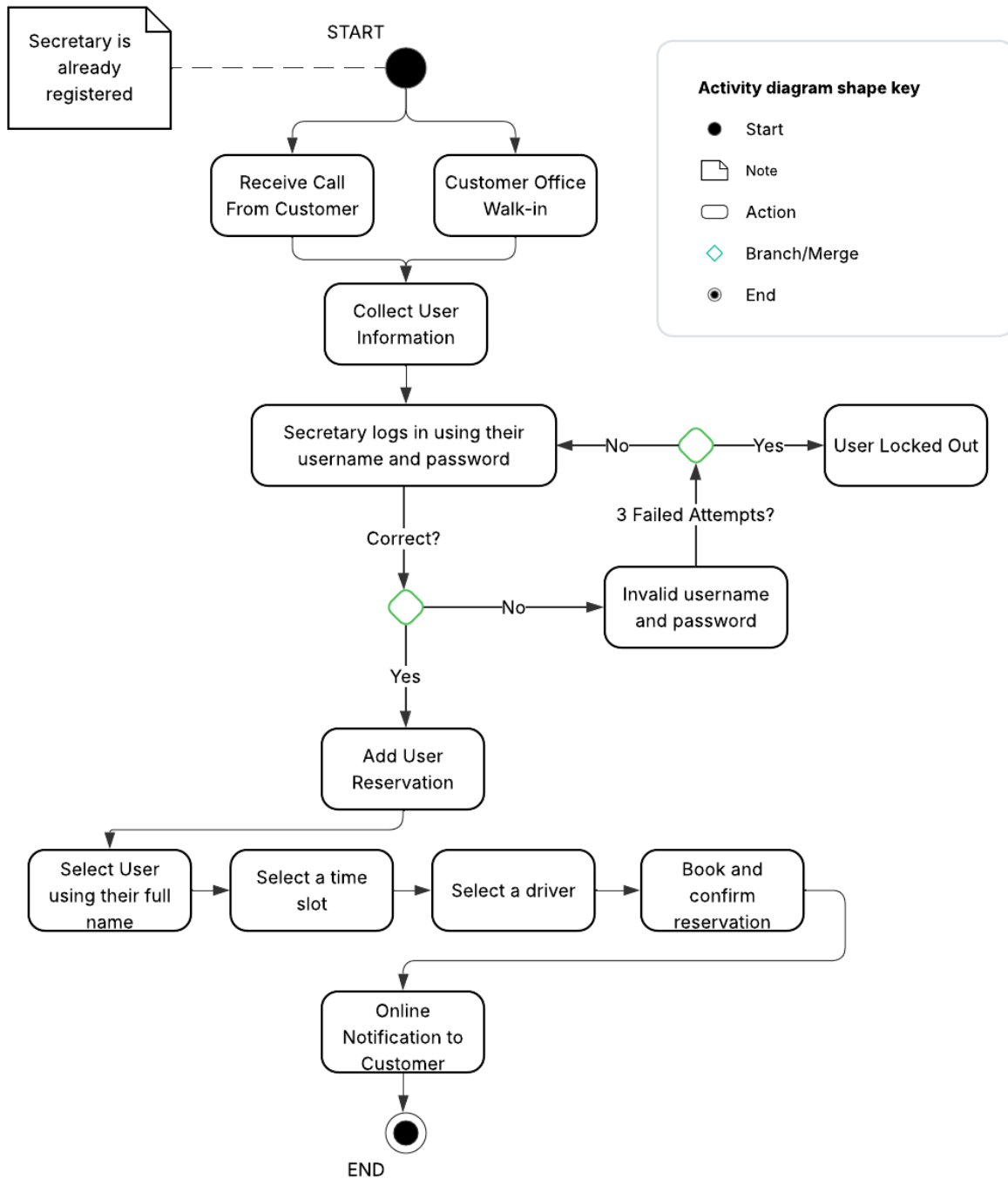
### UML Diagrams

#### UML Use Case Diagram

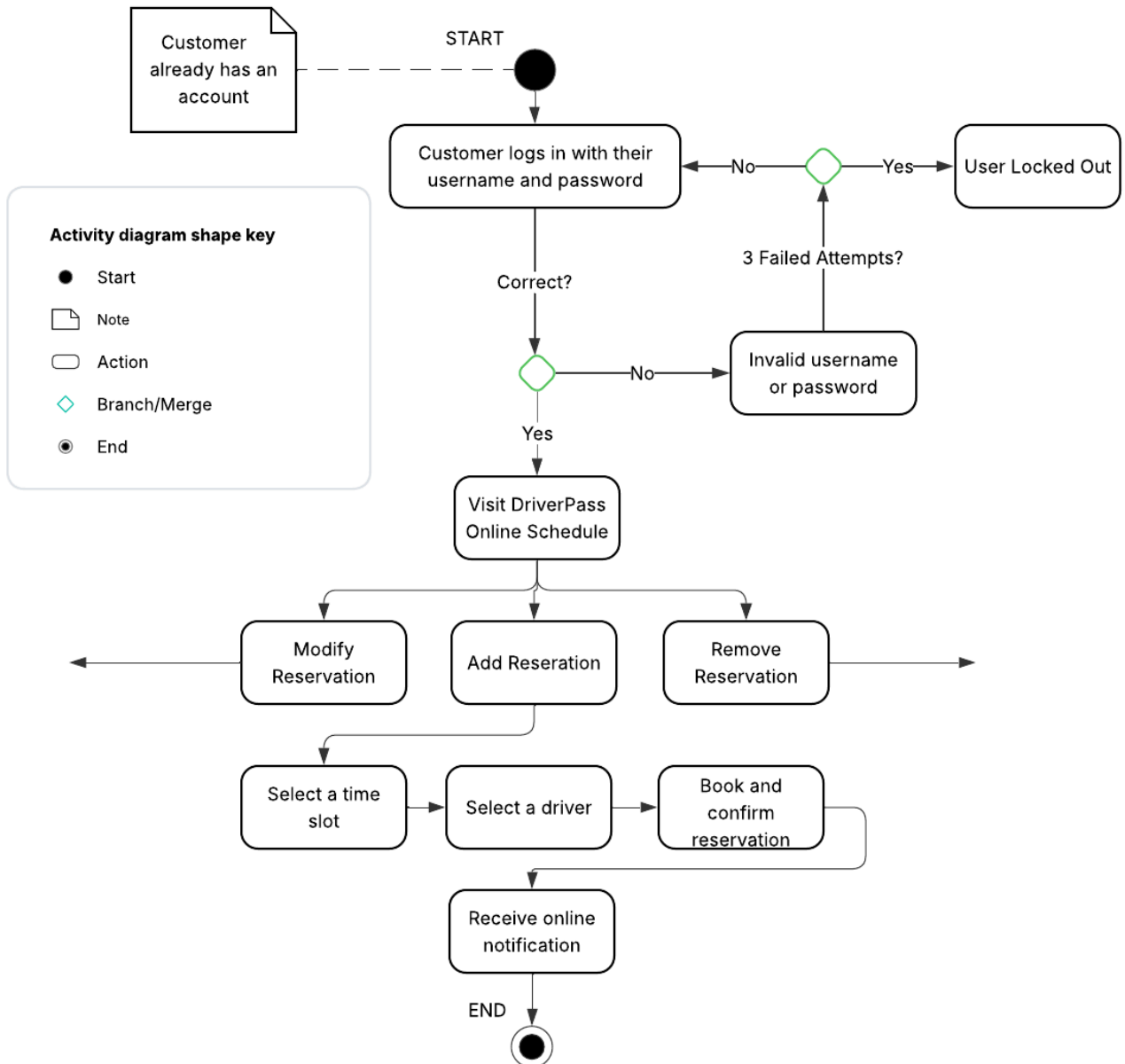


## UML Activity Diagrams

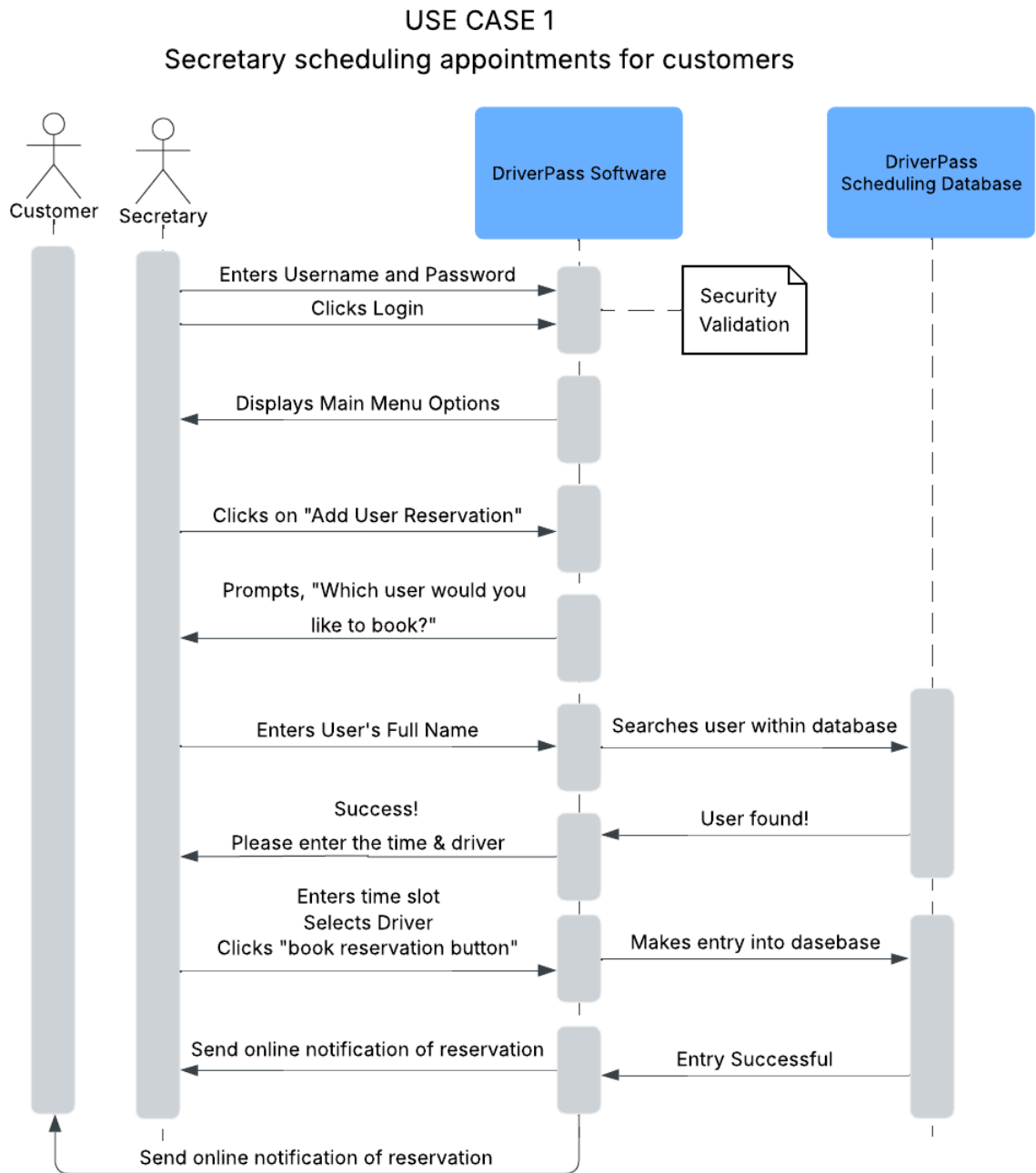
### USE CASE 1 Secretary scheduling appointments for customers



## USE CASE 2 Customer Adding a Reservation Online

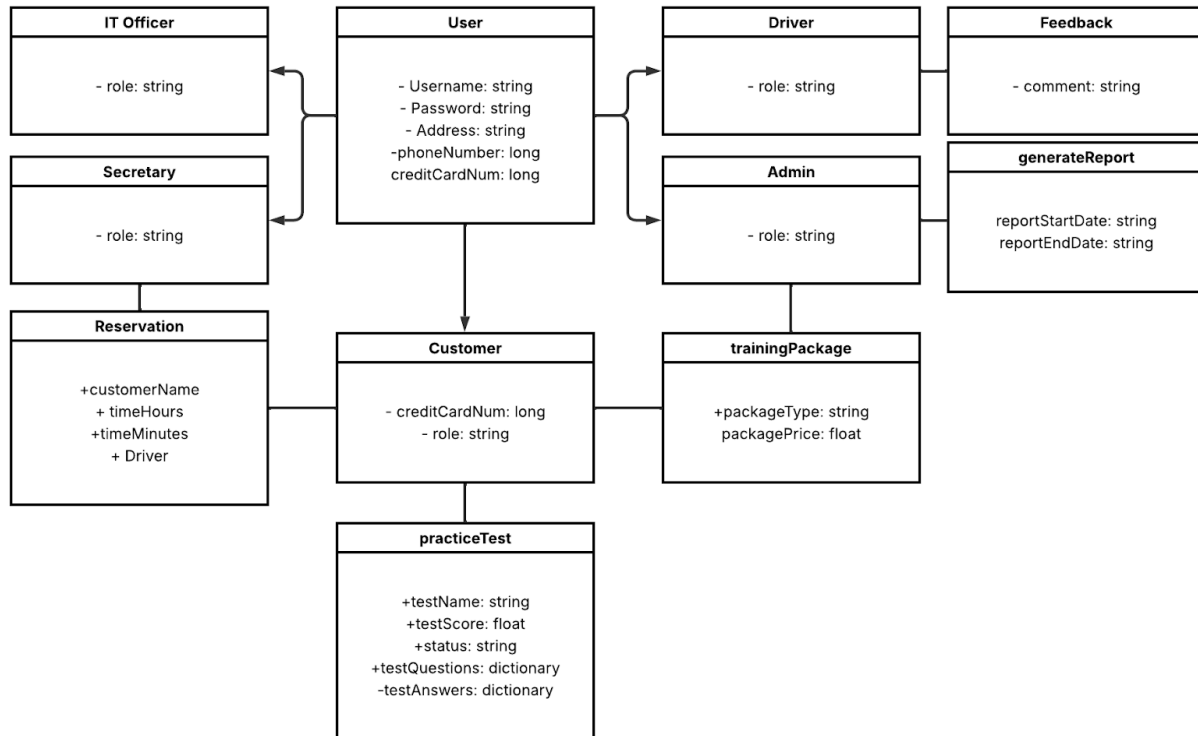


## UML Sequence Diagram



## UML Class Diagram

DriverPass UML Class Diagram



## Technical Requirements

Based on the diagrams that I have created, the technical requirements for my system are to be considered a web-based application that can be run on multiple devices such as a laptop, mobile device, tablet, or desktop, and to be able to run on various operating systems such as Windows, Android, and iOS.

Hardware that would be necessary for this application to run effectively is a reliable cloud-based or physical server. The user would also need minimum system components of: 8GB of ram, Intel Core i3 processor, and 256 GB of storage if run on a desktop or laptop. The user would also require peripheral hardware such as a mouse and keyboard, or if the application is run on a tablet or mobile device, their fingertips with a functional touchscreen.

In terms of software that would be necessary for this application to run smoothly would be usage of the python programming language for the backend, and HTML/CSS/Javascript for the frontend. MySQL would be the language necessary to implement the database system for DriverPass. An operating system that could be useful to include in DriverPass's operation is Linux in addition to Windows, iOS, and Android.

The tools necessary for these requirements to be met in a timely manner would be IDE subscriptions for developers, a CASE tool for effective system planning, and electronic devices (a laptop) provided for all members contributing to the project.

The infrastructure necessary for the DriverPass system design are hosting platforms such as AWS, Google cloud, etc. Also, the use of this application – especially the calendar, where users can modify reservations – is highly dependent on a stable internet connection with decent speed.