Southern New Hampshire University
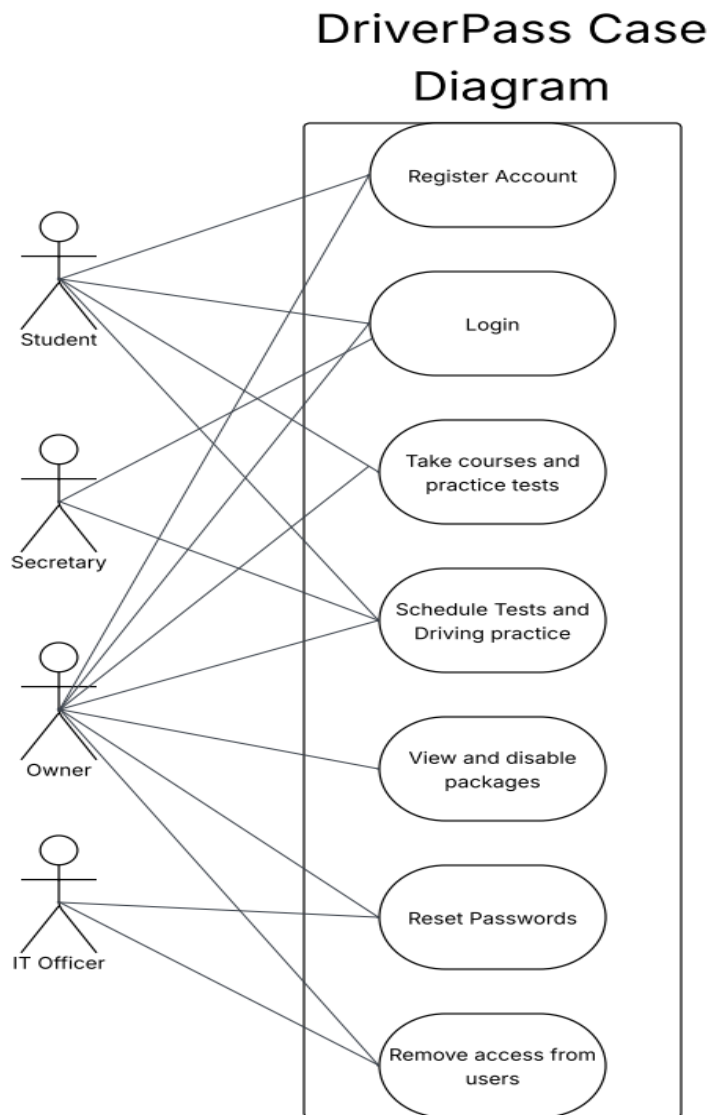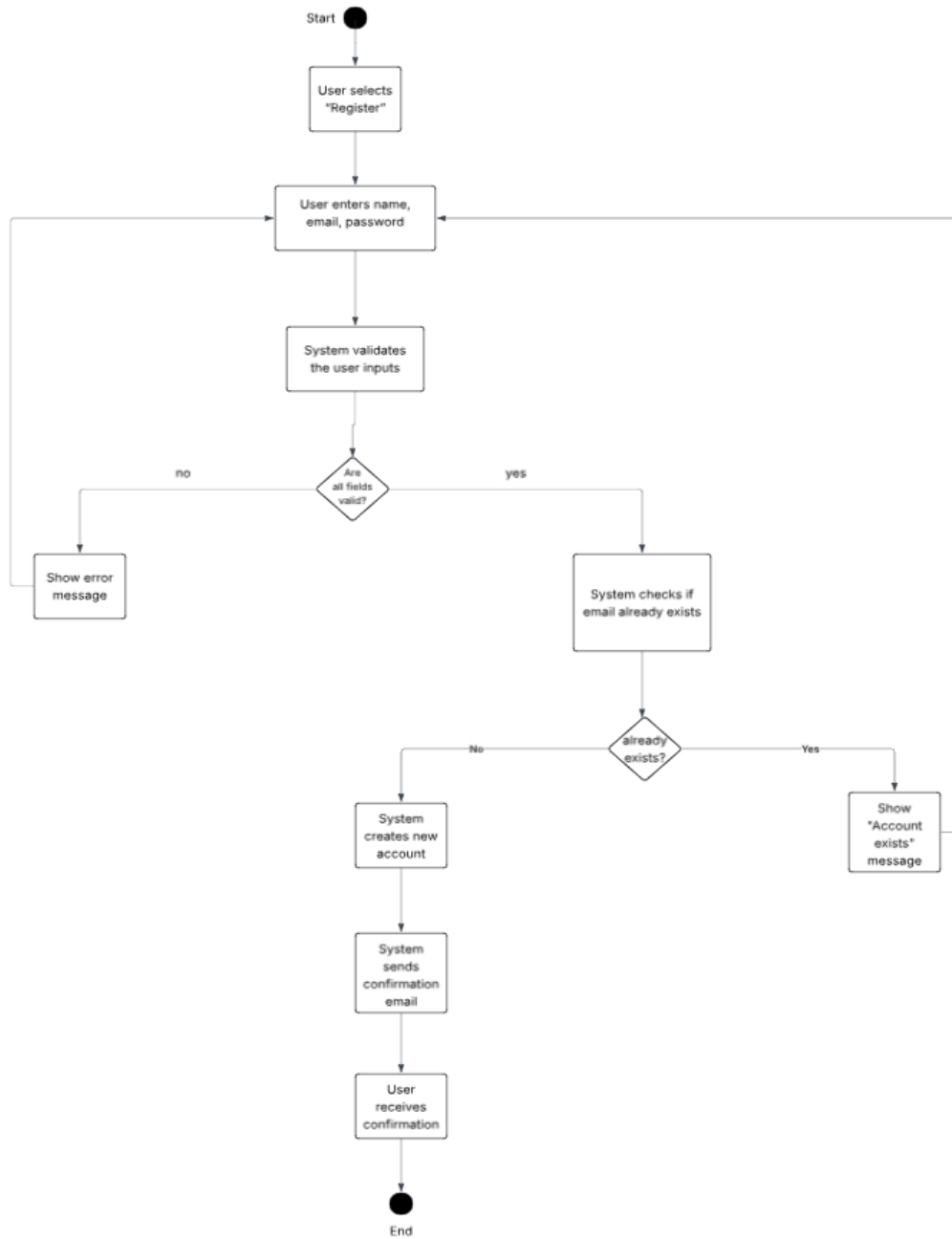
CS 255 System Design Document
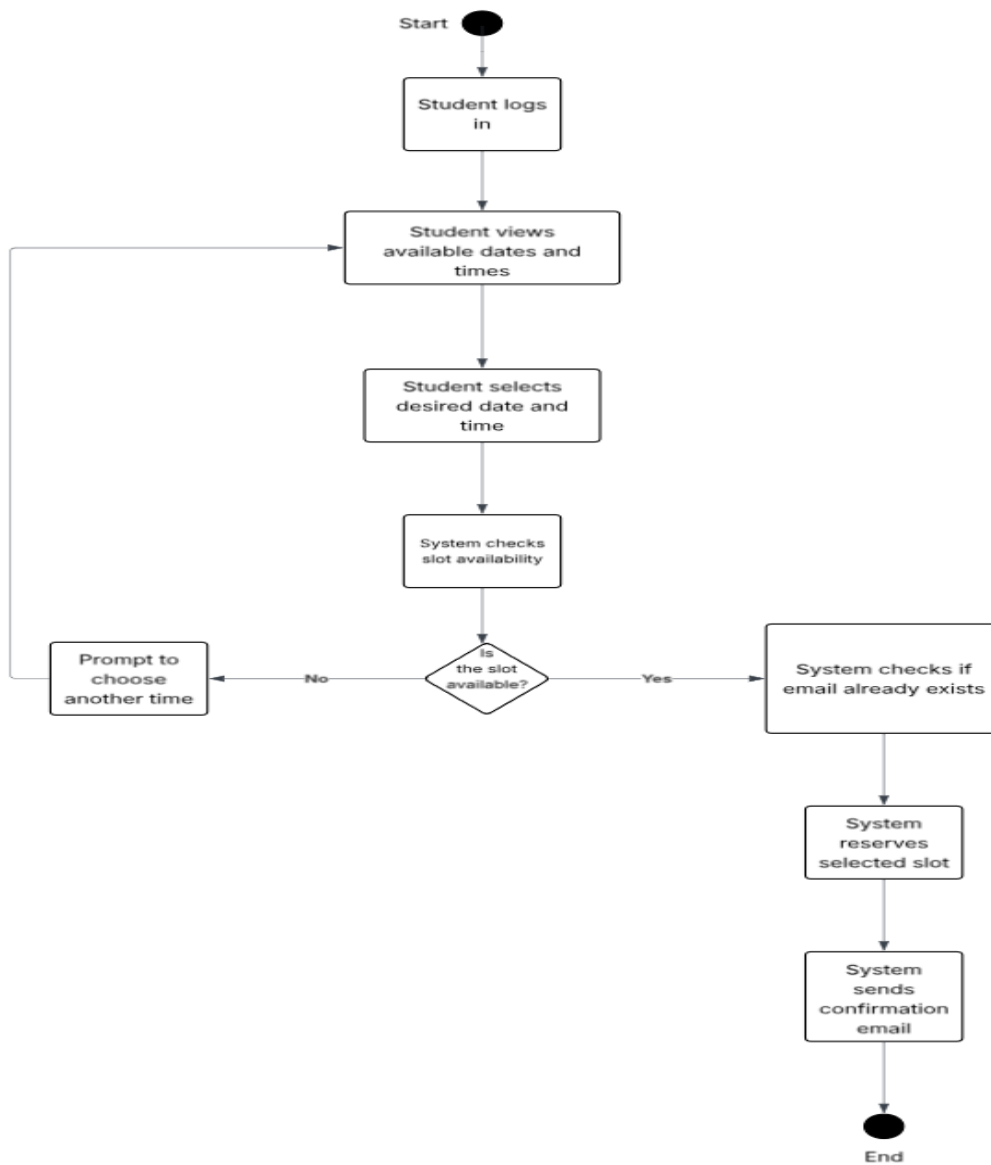
UML Diagrams

UML Use Case Diagram

UML Activity Diagrams

Register An Account

Start ●

User selects
"Register"

User enters name,
email, password

System validates
the user inputs

no ← Are all fields valid? → yes

Show error
message

System checks if
email already exists

No ← already exists? → Yes

System
creates new
account

Show
"Account
exists"
message

System
sends
confirmation
email

User
receives
confirmation

●

End

Schedule Driving Test

Start ●

Student logs in

Student views available dates and times

Student selects desired date and time

System checks slot availability

Is the slot available?

No → Prompt to choose another time

Yes → System checks if email already exists

System reserves selected slot

System sends confirmation email
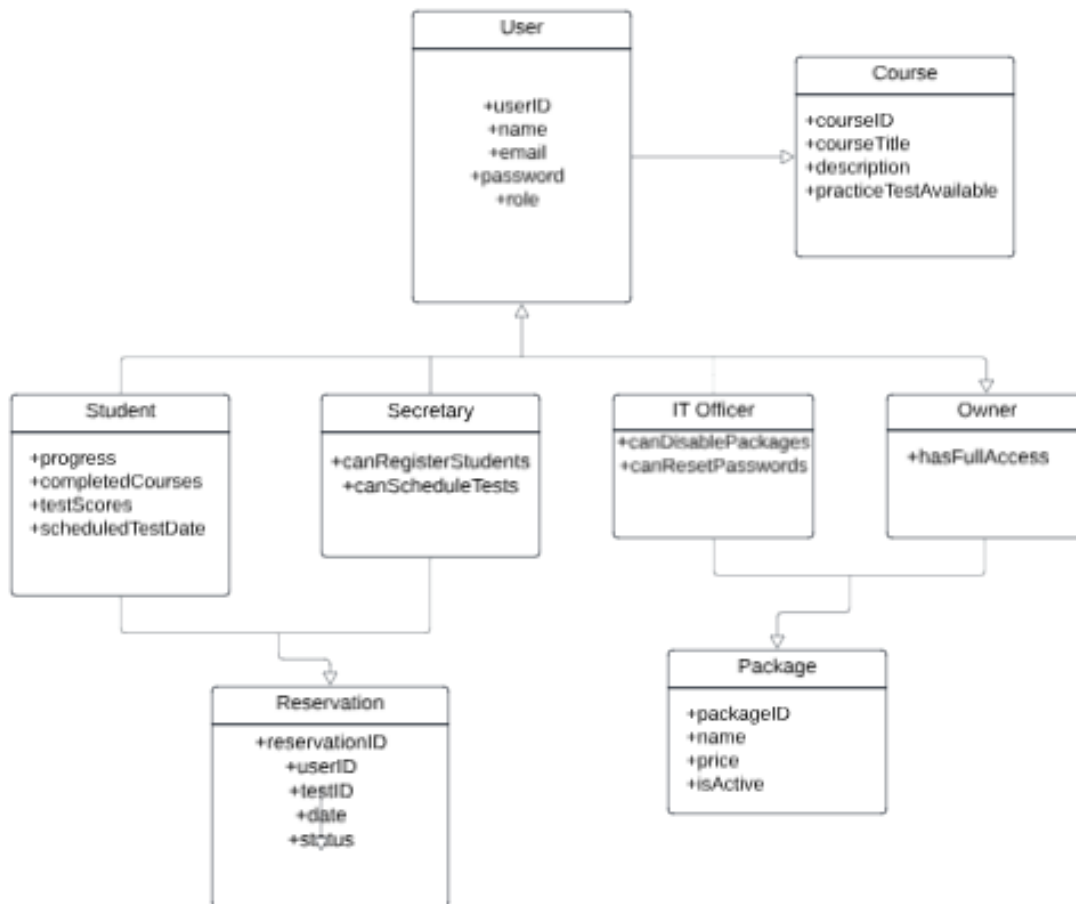
● End

UML Sequence Diagram

UML Class Diagram

Technical Requirements

Hardware Requirements:

- A stable internet connection is needed to use the DriverPass system from any location
- The system will be hosted on a cloud-based server so the client does not have to worry about maintenance.
- Devices accessing the system should have sufficient storage space.
- The system must be accessible through any browser on any type of device.

Software Requirements:

- The system should run on a Windows cloud server that is compatible with Microsoft environments.
- SQL will be used to manage and store user data, reservations, test results, and package details.
- A firewall will be implemented on the server to restrict unauthorized access and protect against intrusion.
- The system will be accessible through any up to date browser.