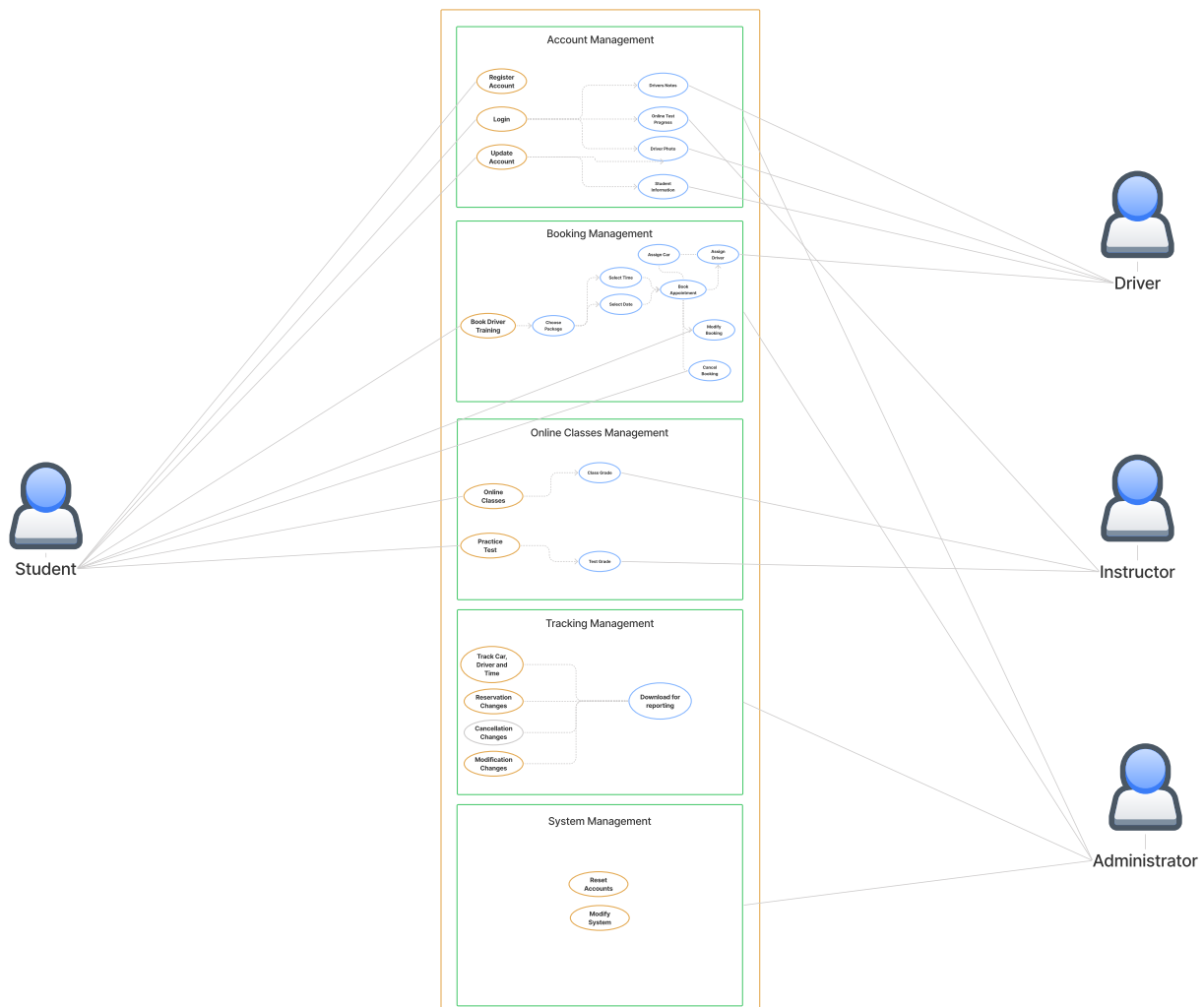Southern New Hampshire University
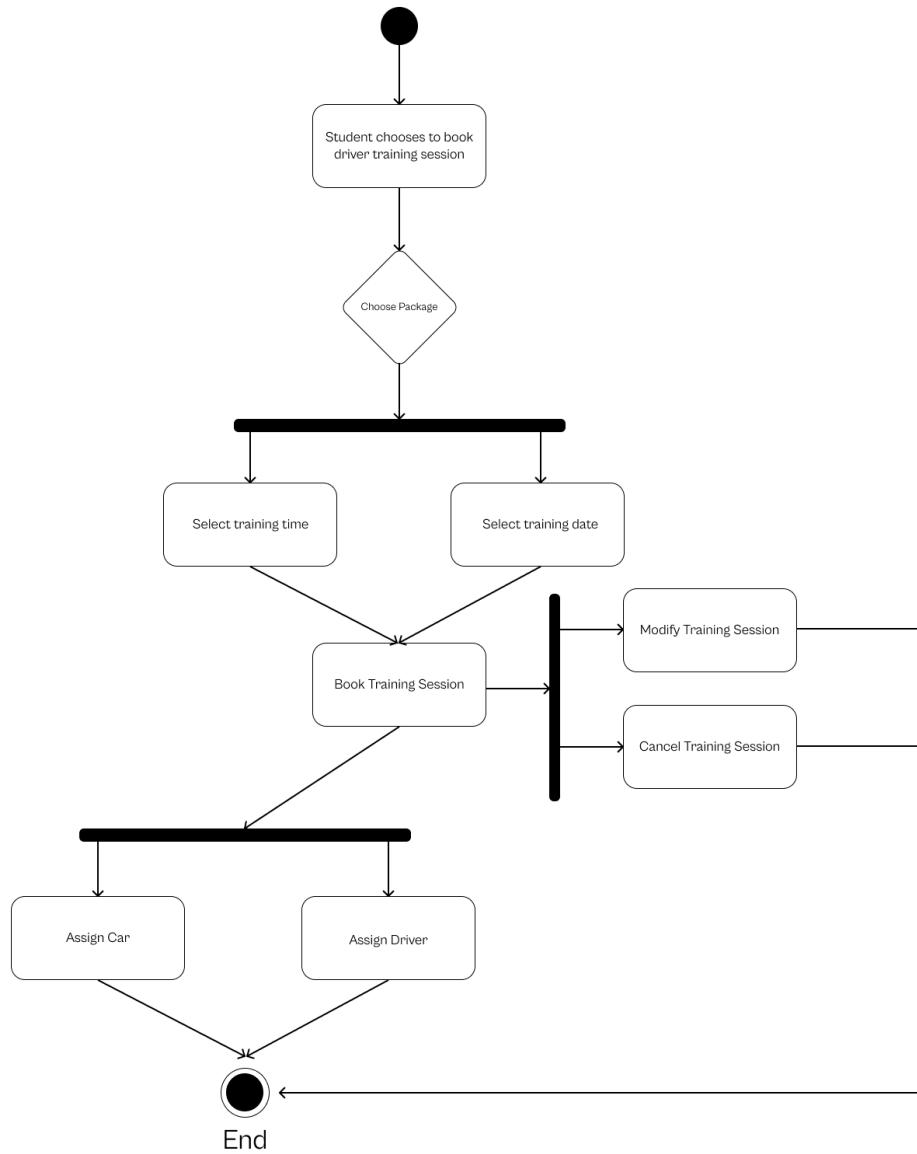
CS 255 System Design Document Template

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.
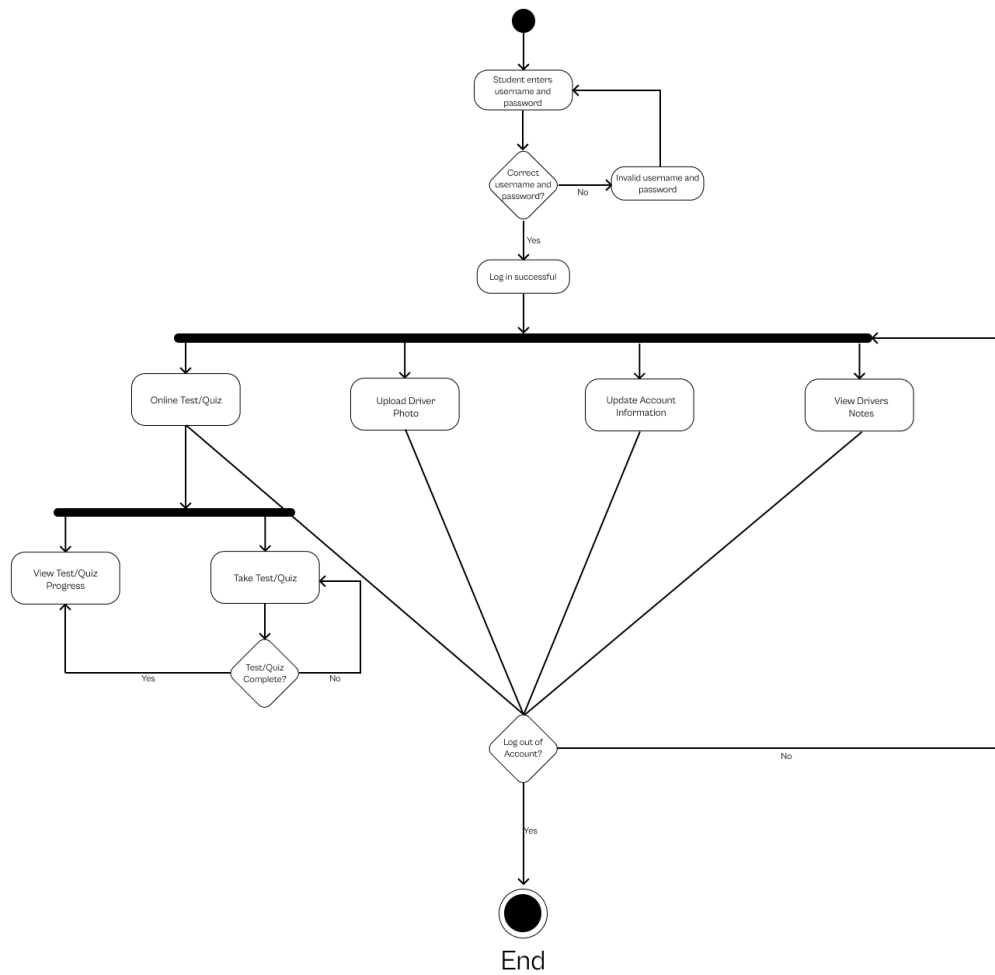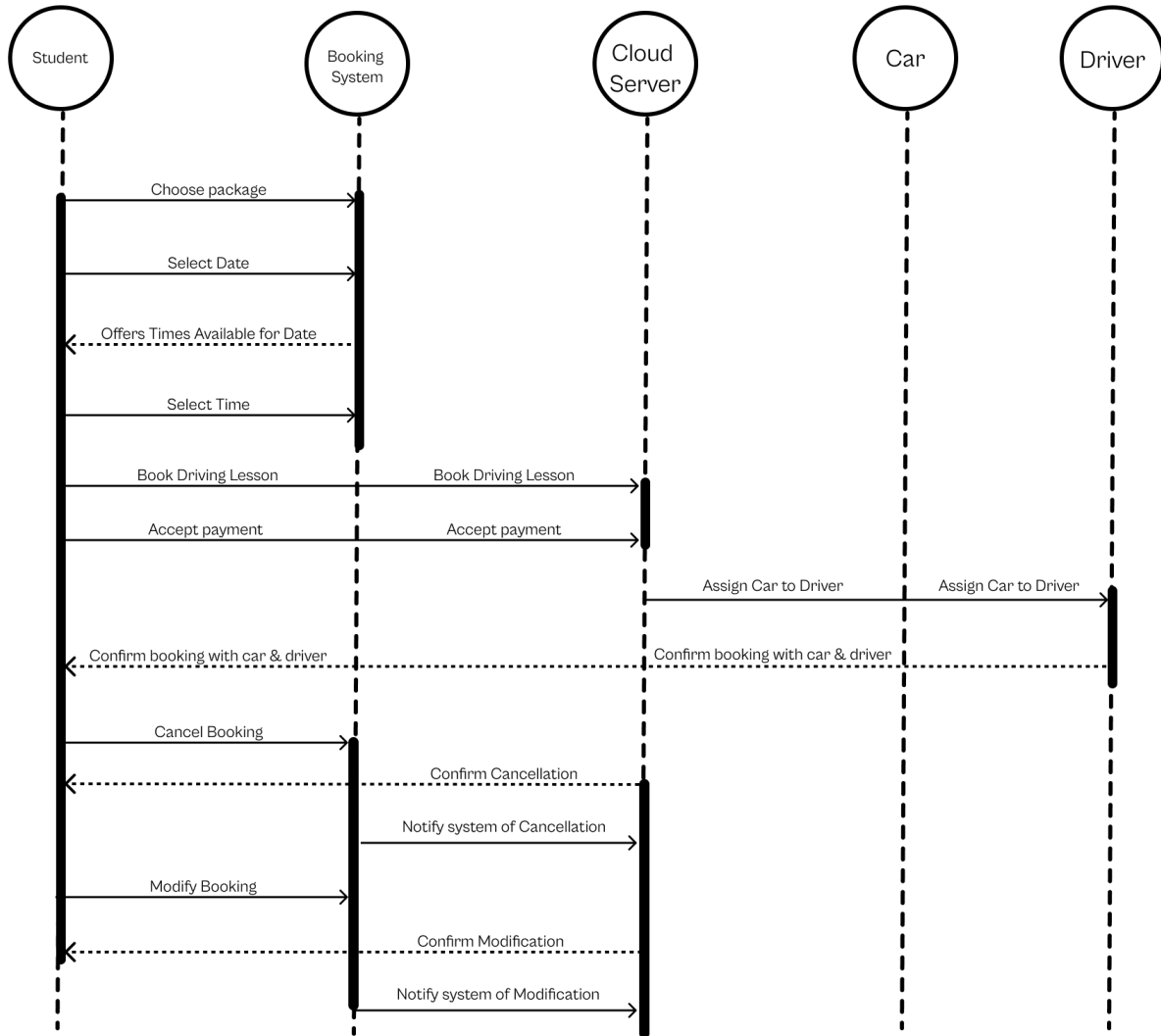
UML Diagrams

UML Use Case Diagram

UML Activity Diagrams

```
                         ●
                         │
                         ▼
              ┌─────────────────────┐
              │ Student chooses to book│
              │ driver training session│
              └─────────────────────┘
                         │
                         ▼
                      ◇ Choose Package ◇
                         │
              ━━━━━━━━━━━━━━━━━━━━━━━━━━
                │                    │
                ▼                    ▼
        ┌──────────────┐     ┌──────────────┐
        │Select training│    │Select training│
        │    time       │    │    date       │
        └──────────────┘     └──────────────┘
                │                    │
                └────────┬───────────┘
                         ▼
              ┌──────────────────┐      ┌──────────────────────┐
              │Book Training      │─────▶│Modify Training Session│
              │Session            │      └──────────────────────┘
              └──────────────────┘
                         │               ┌──────────────────────┐
                         │               │Cancel Training Session│
                         ▼               └──────────────────────┘
              ━━━━━━━━━━━━━━━━
                │          │
                ▼          ▼
        ┌──────────┐  ┌──────────┐
        │Assign Car│  │Assign Driver│
        └──────────┘  └──────────┘
                │          │
                └────┬─────┘
                     ▼
                    ◉
                   End
```

Student enters username and password

Correct username and password?

No → Invalid username and password

Yes

Log in successful

Online Test/Quiz

Upload Driver Photo

Update Account Information

View Drivers Notes

View Test/Quiz Progress

Take Test/Quiz

Test/Quiz Complete?

Yes

No

Log out of Account?

No

Yes

End

UML Sequence Diagram

UML Class Diagram

Login
-userName: String
-Password: String

Driver
+studentName: String
+Time: int
+Date: int
+Car: String
+Location Pickup: String

Administration
+adminStatus: int

Student
+Name: String
+ID: int
+Address: String
+Email: String
+Phone: int
-Payment: int

Tracking/Reporting
+reportDate: int
+report: String
+reportType: String

Account
+studentName: String
+Test: String
+Quiz: String
+testProgress: int
+driversNotes: String

Booking Appointment
+studentName: String
+Time: int
+Date: int
+Driver: String
+Car: String
+locationPickUp: String
+locationDropOff: String

Booking Order
+studentName: String
+orderNumber: int
+Time: int
+Date: int
+packageSelected: String
+paymentMethod: int

Southern New Hampshire University

Technical Requirements

Hardware requirements for the user:

- mobile, laptop or desktop device
- Wifi or ethernet connection with internet connection
- Power sources

Software requirements for the user:

- Web browser (Safari, Chrome, Firefox etc)
- Operating system (Mac, Windows, Linux)

Hardware required for admin:

- cloud server
- Physical server for backup
- Wifi or ethernet connection with internet connection
- Power sources
- Locational services

Software requirements for admin:

- Operating system: Windows
- DriverPass Application
- Security software to protect application

Tools required for development, admin:

- Desktop and/or laptop with programming softwares (Eclipse, VS code, Xcode)
- Wifi or ethernet connection with internet connection

Infrastructure requirements:

- cloud server
- Physical server for backup
- Power supply to building
- Insurance for building
- Parking for students and employees
- Payment processing