# CS 255 System Design Document – Kat Gilliland

## UML Diagrams

### UML Use Case Diagram

***Use Case Diagram for DriverPass’ Login Process:****A diagram of a person's work flow

Description automatically generated*

### UML Activity Diagrams

***Activity Diagram for Taking Online Practice Tests and Tracking Test Progress:***

***A diagram of a company

Description automatically generated***

***Activity Diagram for Viewing and Purchasing On-The-Road Training Packages:***

***A diagram of a process

Description automatically generated***

### UML Sequence Diagram

***Sequence Diagram for Viewing and Purchasing On-The-Road Training Packages:***

*A diagram of a customer service

Description automatically generated*

### UML Class Diagram

***Class Diagram for DriverPass System:***

A diagram of a software application

Description automatically generated with medium confidence

## Technical Requirements

***Technical Requirements for the DriverPass System:***

* The system shall be created within a cloud-based architecture to allow for scalability, faster performance, and assistance with automatic backups and security updates.
* The system shall be cross-platform and be accessible across all types of operating systems and devices.
* The system’s backend shall be connected to a customer database to store and keep track of user information.
* The system shall integrate with a cloud reporting tool to track patterns and changes in data.
* The system shall prompt a new user to create an account and a returning user to login to their existing account.
* The system shall validate user credentials when logging in.
* The system shall provide an option for the user to reset the password to their DriverPass account should they have any issues logging in.
  + If the user selects the option to reset their password, the system shall send them a link to the email address registered to their account with instructions on how to do so.
* The system shall allow the user to complete online practice exams and the ability to track their progress.
* The system shall allow the user the ability to view and purchase any of the on-the-road training packages offered by DriverPass.
* The system shall give the user the ability to create, modify, or cancel appointments with DriverPass’ trained driving instructors either online or by calling DriverPass HQ directly.
* The system shall give the user the ability to view their on-the-road training history and driver notes from each appointment.
* The system shall offer the ability to download reports and track changes to DriverPass records. Access to this functionality and data will depend on the user’s role within the system.
* The system shall offer the ability to add or disable the on-the-road packages offered by DriverPass. Access to this functionality will depend on the user’s role within the system.