# CS 255 Business Requirements Document

## System Components and Design

### Purpose

* The client is Liam, the owner of DrivePass.
* The purpose of this project is to create online classes and practice tests to help people pass driving tests at the DMV. DrivePass will also provide its customers with on-the-road training.

### System Background

* DrivePass wants their customers to be able to make reservations for driving lessons online using their account.
* They also want there to be access to the system for maintenance and modifications as well as be able to manually create reservations and appointments.
* The components needed for this system are a web-based application with a front-end user interface and a back-end database tables linked to the user interface.
* The problem DrivePass are trying to solve is to provide better driving training through online classes and practice tests and on-the-road training.
* The system should be able to schedule driving lessons online by a user or input by an employee.

### Objectives and Goals

* Goals: When completed this system should be able to allow a user to create an account where they input their personal information. A user should be able select a package or call and appointment is manually entered into the system.
* Objectives: Measurable tasks to ensure the system is designed correctly include creating use case diagrams, researching user interface designs, and building class diagram.
* Goals: Users should be able to use the system as learning management system to coordinate materials and assessments using the online learning modality.

## Requirements

### Nonfunctional Requirements

#### Performance Requirements

* The system will run in web-based environment accessible be any device with internet access.
* The system should be updated daily.
* Updates and backups should be taken care of automatically or through a service so DrivePass can focus on the business side of things and remove technical complications.

#### Platform Constraints

* The system should run on a Windows server platform, utilizing Internet Information Services (IIS).
* The backend of the system requires a relational database.
* The backend of the system should be accessible to the IT admin.

#### Accuracy and Precision

* The system will distinguish between different users by a secure login that establishes user rights.
* Input is case-sensitive for user passwords, for the rest of the system the input is not case-sensitive.
* The system should inform the admin of a problem as soon as it is detected.

#### Adaptability

* Logs should be kept to see who canceled or modified reservations
* The system should be able to generate an activity report.
* Yes, the system should allow users to update and edit personal information.
* IT administrators have full access over all user information and system variables.

#### Security

* Employees have different rights and roles.
* User’s passwords have to have a minimum of 10 characters, with at least one capital letter and lowercase letter, one special character, and one number, and cannot be the same as the user login.
* The system should allow 3 incorrect login attempts then it locks the account to prevent a “brute force” hacking.
* If a user forgets their password, they have to answer predetermined security questions. And if they are answered correctly, they will receive an email with a one-time password.

### Functional Requirements

* The system shall validate user credentials when logging in.
* The system shall allow users take online classes and practice tests.
* The system shall give customers the ability to make/edit reservations for driving lessons.
* The system shall give an employee the ability to make/edit reservations for driving lessons.
* The system shall allow drivers to write driver notes.

### User Interface

* Online test progress: Should show the tests the customer has taken with the test name, time taken, score, and status. There should be a progress of tests should display as not taken, in progress, failed, or passed.
* Driver notes: Must include any comments the driver left and times for lessons including lesson time, start hour, end hour, and driver comments.
* Information: Customer personal info including first name, last name, address, city, state, zip code, phone number, and email.
* Special needs
* Driver photo
* Student photo

### Assumptions

* Assuming users have internet access. Without internet the user will not be able to access the web-based application
* The user will have a device to access the system. Without a device (smart phone, laptop, or desktop) the user will not be able to access the web-based application.
* Assume that all backup and security are being performed.
* Assume there is a link to the DMV so that they can update us with new rules, policies, or sample questions.

### Limitations

* If DrivePass’ service provider goes down there is not remote access to the system. Without the service provider it is not possible to remotely access the system.
* The servers cannot be up without power because without power the equipment cannot run.
* There is a time constraint the system is planned to be delivered by May 9th with a sign-off meeting on May 10th.

### Gantt Chart

