# CS 255 Business Requirements Document

## System Components and Design

### Purpose

* Our client here is DriverPass. The purpose of the project is to create their system in the form of a website that will provide tools to students who wish to pass their driving exam. This system will provide tools such as training material, practice exams and the ability to register for live, on-the-road training.

### System Background

* The problem that DriverPass wishes to resolve is the unacceptable number of students who fail their driving test at the DMV. The system should provide online access to classes, practice exams and the ability to book on-the-road training, with the ability to download certain data and documents for access when offline.
* The system should offer different packages for on-the-road training. It should track all reservations, modifications, and cancellations.
* Proper security should also be present. This should be to keep all customers information safe and only grant access to the users and their specific type of access to different features.

### Objectives and Goals

* When complete, this system should be fully functional and provide access to online courses, practice exams, with the ability to download data and documents for offline access.
* The system should also allow the customer the ability to book, modify, and cancel on-the-road training.
* Levels of access should be created to allow only certain employees to make necessary changes and improvements. Access to only certain material based on the chosen package of the customer should be provided.
* A connection with the DMV should be made so that the system can be updated with any changes made by the DMV regarding their exams and training material.
* The interface should be fully functional and provide all necessary information for navigating the system.

## Requirements

### Nonfunctional Requirements

#### Performance Requirements

* The system should be web-based in the form of the website over the cloud.
* The system should be fast enough to allow users to access the website with no complications.
* The system should have the ability to be updated, if ever the client decides to add new features.

#### Platform Constraints

* The platform should operate on Linux.
* The system is using the cloud to manage the security and will also handle the databases required for the backend.

#### Accuracy and Precision

* Each user should be able to create a username and password when first accessing the website. The input should be case-sensitive, and the system should have multi-factor authentication measures to make it extremely difficult for any unauthorized user to access it.
* The system should inform the admin immediately of any issues, glitches or bugs with the website and possible automatic backups to prevent data loss.

#### Adaptability

* The system will allow you to make modifications to users and allow you to remove users without the changing the code.
* The system will slowly be introduced into platform updates as the need arises for more advanced features. When it is decided that a new feature is to be added, platform updates will commence.
* The IT admin will have full access to the system to make any changes necessary, such as removing former employees and restricting and granting access as needed.

#### Security

* The user will require a username, password, and other methods of multi-factor authentication.
* The cloud will be responsible for the data exchange between the client and the server.
* The system should disable the account after three incorrect credentials to prevent obvious attacks to access the user’s account.
* If a user were to forget their login, the system will prompt said user to enter the email they use for the account where they will receive a link to reset their password.

### Functional Requirements

* The system should validate all user credentials when logging in.
* The system should book and save any reservations made by the user.
* The system should provide practice tests and classes.
* The system should show the information of the driver that the user will be paired with.
* The system should offer three different driving packages.
* The system should operate fast and efficiently.
* The system should provide custom access based on the user and their designated privileges.
* The system should show the tests and courses that the user has completed.

### User Interface

* The interface must provide the customer the option to make reservations for driving appointment packages and to enroll in the online classes and tests.
* The interface must allow DriverPass employees to make changes and update the system as needed.
* The user should be able to operate the interface from a mobile device, laptop, desktop, or any other device that has an internet connection.

### Assumptions

* With no budget outlined, we will assume that all the requirements we have listed for the completion of this system is within it’s limits. This is to include the cloud and the Linux environment.
* We are also assuming that we have easy access to all necessary technologies and data from DriverPass.

### Limitations

* We have roughly five months to build this system with no designated budget.
* I believe a mohor limitation we currently face is the manpower needed to build the website. We will need more employees involved to complete the system within the timeframe provided.
* An agile approach will be necessary for this project.

### Gantt Chart

*Timeline

Description automatically generated*