# CS 255 Business Requirements Document

## System Components and Design

### Purpose

* DriverPass wants to design a system to help people pass their driving exams.
* Provide training and tools to help aspiring drivers.
* Provide people with an easy and up to date way to take practice tests and set up appointments for on the road driving lessons.

### System Background

* Connect to the DMV so they can stay up to date on DMV policies. Notification when DMV has an update.
* Access system anywhere with an internet connection.
* Need to be able to track which drivers are with which customers.
* Track reservations (who made a reservation, canceled it, or modified it).
* Print activity reports of the above point.
* Owner needs to be able to add and remove people from the system.
* Owner wants to disable packages if he doesn’t want them selling.
* Run off the web, preferably off the cloud.
* Set user roles for security. (Owner needs full access to everything)

### Objectives and Goals

* Provide online practice tests.
* Customers can set reservations for on the road training anywhere through their account.
* Users should be able to make appointments, cancel, and modify their own appointments online.
* Interface should look like the one provided in the interview.
* Customers can register for packages over the phone.
* Driving lessons are two hours long split into multiple sessions based on package bought.

## Requirements

### Nonfunctional Requirements

#### Performance Requirements

* The system should be updated often to keep everything up to date with DMV standards. It is important that students are given accurate information to pass their tests.
* The system is web-based and can be accessed from your computer or phone.
* System should be fast for the students using the software. Testing on slow software is not ideal.

#### Platform Constraints

* Any OS with access to a browser should be able to run this system.
* Will need a database to store information of users and DMV regulations.
* Mobile version should be available for mobile users.

#### Accuracy and Precision

* Password and usernames must be case-sensitive and usernames cannot be the same. This makes sure everyone has their own unique account they can access.
* Admins should be alerted if there are two identical usernames or if someone tries to log on too many times with the wrong password.

#### Adaptability

* Users are stored in their own class so they can be modified as needed.
* Platform updates will happen when DMV updates their regulations. So it just needs to be able to show they new rules if anything changes.
* IT admin will need full access to users in the system, as well as access to the website so they can make changes if needed.

#### Security

* Users must use two-factor authentication to log in to their account.
* Passwords must meet a required length and level of complexity.
* Data being exchanged should be encrypted when in transfer and decrypted when accessed by the system.
* If an account is hacked the account should be locked or disabled until we can secure it.
* Users can reset their password using their email address and their two-factor authenticator.

### Functional Requirements

* The system shall validate user credential when logging in.
* The system shall provide practice tests for students during training.
* The system shall let users purchase various driving packages and make reservations and alert the instructors so they can schedule time for driving practice.
* The system shall track all purchases made on the website and print an activity report.
* The system shall keep itself up to date with all DMV regulations.
* The system shall be able to add and remove users and other roles.

### User Interface

* The interface should show the student information, their testing progress, driver notes, and photos of the student and the driving instructor.
* The different users are the driving instructors, admins, and customers.
* Driving instructors need to be able to update customer profiles with their driver notes.
* Customers need to be able to see their tests and reservations.
* Customers also need to be able to take practice tests through the website as well.
* Customers need to be able to interact with the interface with a computer or their phone.
* Admins need to be able to see and edit all aspects of the interface. They also need to be able to add and remove customers and drivers as needed.

### Assumptions

* I assume that we will have the necessary money to support this system and its development.
* Users will have a basic understanding of technology and interacting with the interface.
* Users will have access to either a phone or computer.

### Limitations

* With only 3 months to work on the project, it might not turn out as polished as it could be.
* They have no developers so if something breaks they can’t fix it without hiring outside help.
* Different browsers may have more limited support than Chrome or Firefox.
* Application cannot be accessed without a secure internet connection.

### Gantt Chart

Timeline

Description automatically generated