# CS 255 Business Requirements Document Template

## System Components and Design

### Purpose

* The Client DriverPass would like a system built that would give easier access to driving instructions and training to drivers who need it. The system needs to have tracking of drivers, users, appointments, scheduling, and testing data.

### System Background

* DriverPass is trying to better manage its business in a way that is more automated, organized, and reliable. The DriverPass system will need to have a website where users can manage their accounts, schedule appointments, see history, and see driver information. A database to store information from the website, as well as internal data, is also required. This database also needs to be accessible by employees in a way that is user-friendly and includes user-based permissions.

### Objectives and Goals

* For this system to be considered complete, it needs to have a GUI for clients to make appointments, cancel/modify appointments, see online test progress, driver notes, driver photo, account photo, and any special needs whenever they wish. These appointments also need to be modifiable by in-house staff. There needs to be a database that has the features of user-based permissions, logging of changes, and resetting of user data. There also needs to be an internal GUI as well that would allow scheduling changes, resetting of user data (based on permissions), and also give notification of any changes that the DMV would make in order for DriverPass to stay compliant.

## Requirements

### Nonfunctional Requirements

#### Performance Requirements

This app needs to be web-based so that it can easily be used as an application on a phone or on the web to ensure convenience for the user and trainer. This application should be updated either monthly or bi-monthly to ensure functionality and security.

#### Platform Constraints

I feel that we should run this app as a cloud-based application. That will get us over the headache of compatibility issues. There will need to be a database that stores user information, course data, and scheduling information.

#### Accuracy and Precision

Users will be distinguished by whether they have signed up to be a DriverPass instructor or whether they have admin privileges. All other users will on have basic user access. Input is case-sensitive to enhance security.

#### Adaptability

There will need to be functionality within the DriverPass program for users to delete their accounts via the account page. Admins should also be able to delete accounts or send delete account options to a customer.

#### Security

For user Log-in there needs to be an email and a password. There could also be a phone number sign-in option. To give the user optimal security if there are 15 attempts on an account, the account will be locked until the account password is changed. There will also be an option for 2-factor authentication and an email that lets the user know when their account has been signed in from a new device.

### Functional Requirements

**Email system**

For the system to communicate with users properly there needs to be email notifications that are in place. The system must communicate with a user on the topics of scheduling, account changes, and updates to the system.

**Authorization levels**

The system must have 3 different levels of access to the system for the different roles that there will be to ensure a successful system. There will be basic user, Instructor, and Admin roles.

**Notification System**

The system needs a notification system through the application. This will remind users of upcoming appointments that way the system runs more efficiently. There could also be functionality for Admins to push notifications to users about changes on their accounts.

**Database**

There needs to be a database that will store user information, training info, and scheduling data. Without this, there will be no place to store this information and the system will fail.

### User Interface

For any user, there needs to be a tab for the account, schedule, and home page. For admins, there needs to be an additional tab that allows admin-only controls. For instructors a tab that allows them to see their earnings is important. Then users looking for an instructor should have a find instructor tab. This system can be accessed completely online, but an application should be considered.

### Assumptions

We are assuming that users will have a device to run the system and some way of connecting to our servers via the internet. We are also assuming that the user has a vehicle that they can use for training. The system will also need a link to payment handling for subscriptions.

### Limitations

A major limitation of this system is that it requires users who will do the teaching. Without those users, the system will have no purpose.

### Gantt Chart

Timeline

Description automatically generated