# CS 255 Business Requirements Document

## System Components and Design

### Purpose

* Client – DriverPass
* Purpose – create an online system for driver pass to be able to provide online practice tests as well as scheduling driving lessons with instructors
* Will help new drivers more effectively pass the driving exam at the dmv

### System Background

* Wants to help drivers prepare for and pass the driving exam
* Must be able to schedule lessons either by user or by the secretary
* User friendly interface to see current test progress and upcoming lessons scheduled
* Uses role based access for various employee roles and the users
* Must be able to store data in the cloud such as cars, drivers, time of lesson, user name, user address, user phone number, state and billing information as well as a pick-up/ drop-off location
* Be able to print activity reports to track changes to the data

### Objectives and Goals

* Users should be able to register for driving lessons either online or through a driverpass secretary
* Be able to change or cancel lessons either online or through a secretary
* Incorporate automatic user password recovery
* Users can take practice tests and review online classes to help with the written exam portion
* Keep an activity log of all changes and who implemented them in the system including scheduled lessons, user changes, driver changes, and administrator changes.
* Be able to print activity logs
* Update with current DMV policies and procedures
* Offer the three suggested packages with room for adding more and disabling packages as needed
* Be available online and via mobile access
* System will store user data such as name, address, phone number, and billing information.
* Users or administrators will be able to update profile information
* Security via role based access and cloud services to protect vulnerable user information
* Keep track of available cars and drivers as well as availability for scheduling
* Drivers should have access to the system to see scheduled lessons with a car and student
* Create a viewable log of lessons including related car, driver, and student information
* Administration should be able to view driver lesson status and scheduling
* Administration can make changes to the system
* Update lesson schedules automatically based on availability.

## Requirements

### Nonfunctional Requirements

#### Performance Requirements

* The system shall run as a web based platform that is available on mobile devices using cloud storage.
* The system shall update lesson scheduling with a quick response time to eliminate issues with delays
* The system shall update monthly to allow for scheduling updates and changes to the system

#### Platform Constraints

* The system shall run on a windows based server environment
* The system shall be operable in various internet browsers such as chrome, safari, firefox, etc.
* The system shall store its data in the cloud to allow for easy access and secure management of data

#### Accuracy and Precision

* The system shall distinguish users via unique login details such as email and passwords, which will be case sensitive
* The system shall differentiate between users via role based access linked to unique users
* The system shall keep a log of all changes to the system
* The system shall alert administrators of any conflicts or issues as soon as they arise via a notification

#### Adaptability

* The system shall allow changes to the user via object oriented code where the explicit code is not edited but the object is
* The system shall allow for future updates including adding or removing various packages
* The system shall provide full access to the IT admin to update and edit the underlying code of the system

#### Security

* The system shall require user authentication via login details
* The system shall use encryption to send or receive data between the cloud storage
* The system shall limit failed password attempts to 5 before locking out the user
* The system shall provide an automated password recovery system via user email

### Functional Requirements

* The system shall validate user credentials to gain access
* The system shall allow users or a secretary to schedule, change, or cancel driving lessons
* The system shall allow users to take practice tests and track the progress of these tests
* The system shall securely store and transmit data via encryption
* The system shall allow administrators to make changes to the schedule
* The system shall be able to print activity logs tracking all changes
* The system shall allow drivers to access the system showing scheduled lessons
* The system shall record lesson information such as car driver and student
* The system shall update users with changes made by the DMV as they occur
* The system shall provide automated password recovery
* The system shall allow users to register online or through a secretary
* The system shall allow users to pick a package either themselves or through a secretary
* The system shall store and be able to update user information
* The system shall automatically update lesson availability
* The system shall use role based access
* The system shall be accessible from web based and mobile platforms

### User Interface

* The interface needs to be clearly navigable for a variety of users including students, drivers, secretaries and administrators
  + Students should be able to update their information, take practice tests, schedule lessons, and track their progress.
  + Drivers should be able to view the schedule of lessons along with the respective details of the lesson
  + Secretaries should be able to modify, cancel, and schedule lessons based on availability as well as update user information.
  + Admins should be able to print activity logs, modify the system, and change access roles
* The interface should be accessible via web based browser platforms using a computer or mobile device
* The interface should have the company logo at the top and display a user’s test progress, information, special needs, photo of the driver and student, and driver notes which include completed and planned lessons with notes as well as a contact us at the bottom

### Assumptions

* We are assuming users of the system will have an internet connection to allow for cloud access of the system
* We are assuming users will be technologically adept to navigate the interface smoothly
* We are assuming future updates to the system will occur as packages change or changes occur with the company

### Limitations

* Modifying or canceling lessons will be based on a rescheduling or cancelation policy
* Future packages to offer cant be added until we know what they are
* We have limited user feedback until the system is put in place

### Gantt Chart

A diagram with pink squares

AI-generated content may be incorrect.