# CS 255 Business Requirements Document Template

## System Components and Design

### Purpose

* Provide practice and training to students to prepare for driving tests
* Provide online access to students to schedule driving lessons
* Provide the most up-to-date practice materials in compliance with the DMV
* Client is the owner of DriverPass, Liam and his IT officer Ian
* Provide a secure, easily accessible, and user-friendly system for students

### System Background

* Fix the lack of resources accessible to students taking the driving exam
* Stay up to date with DMV exam content
* Offer select packages for students to choose from
* Cloud infrastructure for security and accessibility
* Have Role-Based-access-controls for who has rights in the system
* System needs to be able to track scheduling information

### Objectives and Goals

* The system should provide the most up to date practice tests and material for students
* The system should help students be more prepared for their driving exams
* The system should allow student to schedule, modify, and cancel lessons
* The system should track all activity of schedule lessons
* System should offer security and accessibility

## Requirements

### Nonfunctional Requirements

* System should have high usability with a user-friendly interface for all users
* Should be in compliance with DMV standards and policies
* System should be secure with strong password protection and monitoring
* System should have high performance to handle multiple users at one time

#### Performance Requirements

* System should be web based and able to be accessed from any web browser
* System should have frequent updates for security and stay up to date with DMV policies
* The system should load a web page within 3-5 seconds under normal conditions
* System should be able to handle multiple users at one time and still process normally

#### Platform Constraints

* The system should be a cloud-based infrastructure accessible on multiple platforms
* System should work on MacOS, Windows, Linux, IOS, and Android operating systems
* A database should be created to store user data and reservations
* System should have cloud storage for backups and data

#### Accuracy and Precision

* For security, each user should have a unique username and password
* Input for passwords should be case-sensitive and require a length minimum and one of each of letters, numbers, and special characters
* System should have role-based-access-controls to ensure users have permissions in the system
* System should have notifications and alerts sent to administrators for any suspicious or malicious activity such as too many failed logins

#### Adaptability

* System should allow administrator to modify user roles, scheduled lessons, and decline packages
* System is cloud based so it should be compatible with various platform updates
* Admin should have full system access to control user accounts, reset passwords, and adjust role permissions
* System should have the ability to schedule updates and patches without change to code

#### Security

* User login should have unique username and passwords for each user
* Passwords should meet security standards with a minimum of 8 characters, contain uppercase and lower-case letters, 1 number, and one special character
* Logins should require muti-factor authentication (MFA) as an added step of security
* Accounts should lock after 3 failed logins and should alert administrators if more attempts are executed
* User should be able to reset their passwords with their primary email or personal phone number registered to their account
* Users should be required to regularly update and change their passwords over time

### Functional Requirements

* The system should allow users to reset their passwords
* The system should allow customers to schedule lessons and modify times
* The system should provide access to online training material and practice tests
* The system should allow access to role-based users granting specific permissions
* The system should log and track user activity
* The system should update in accordance with DMV policies and standards
* The system should provide high performance and security
* The system should allow communication messages or alerts be sent to emails

### User Interface

* The interface must be easy and simple to navigate for all users of technical and non-technical
* The customer interface layout needs to have the options to choose from online test progress, driver notes, user information, special needs, driver photo, and student photo
* Secretary will need to access, view, and modify schedules and view customer contact information
* IT officer interface must allow them to modify user accounts, reset password, and monitor activity
* Owner interface must allow them to track activity, disable packages, and control user access

### Assumptions

* Users are expected to have reliable internet access with proper upload/download speeds
* Secretaries should have a basic understanding of technology
* Owner and IT officer should have strong understanding of web-based programs and security frameworks

### Limitations

* System limitation is offline. Lessons ca online be scheduled when connected to internet
* System limitation is customers are not able to customize their own packages
* A limitation would rely in client budget and staying below budget threshold
* Users with non-technical experience may struggle to navigate the system
* System will lack high-end technology such as AI or machine learning capabilities

### Gantt Chart

*A diagram of a gantt chart

Description automatically generated*