Business Requirements Document: DriverPass System

# System Components and Design

## Purpose

- The purpose of this project is to design and develop a training and scheduling system for DriverPass.  
- The client, DriverPass, wants to improve student success on DMV driving exams by offering online test preparation and on-the-road training.  
- The system should allow customers to schedule appointments, access training materials, and take practice exams.  
- It must support multiple user roles (admin, IT, secretary, and customers) with role-based access control.

## System Background

- DriverPass wants to reduce the failure rate of students by providing better training tools.  
- Current students rely only on past tests; DriverPass will offer more comprehensive learning solutions.  
- The system needs to support appointment scheduling, test tracking, lesson tracking, secure login, and administrative oversight.  
- Core components: user registration, scheduling/reservations, training content, test progress tracking, administrative controls, and reporting tools.

## Objectives and Goals

- Allow customers to register and schedule driving lessons online or through staff.  
- Enable customers to view progress on practice tests and lesson completion.  
- Allow admins and IT staff to manage users, reset passwords, and disable accounts/packages.  
- Provide reporting features to track reservations and user activity.  
- Ensure system access is secure and responsive across devices.

# Requirements

## Nonfunctional Requirements

### Performance Requirements

- Must run as a cloud-based web application with mobile accessibility.  
- System should load within 2 seconds and support multiple concurrent users.  
- Reports and test results should be downloadable in Excel format.

### Platform Constraints

- The system should be compatible with Windows and mobile operating systems.  
- It will require a secure cloud backend with a relational database to store user data, test results, and appointment schedules.

### Accuracy and Precision

- Role-based user authentication is required.  
- Inputs such as email and credit card fields must be validated.  
- The system should track and log all changes to reservations and user records.

### Adaptability

- IT admin must be able to disable user accounts or packages without altering the system code.  
- The system should be designed to accommodate future updates and feature expansions.

### Security

- All users must log in with a username and password.  
- The system must support password recovery through secure email verification.  
- Must detect brute-force attacks and temporarily lock out suspicious accounts.  
- Admins should have the ability to reset or disable accounts.

## Functional Requirements

- The system shall allow users to register, log in, and schedule appointments online.  
- The system shall validate user credentials at login.  
- The system shall let users select from multiple training packages.  
- The system shall track test results and lesson progress for each user.  
- The system shall let admins and IT reset or disable accounts.  
- The system shall notify users when DMV updates are available.  
- The system shall generate reports on appointment activity and user actions.  
- The system shall allow driver comments and lesson time tracking.

## User Interface

- Users: Customers, Secretary, Admin (Liam), IT Officer (Ian)  
- Customers can register, schedule appointments, view test progress, and reset passwords.  
- Secretary can create/update customer records and appointments via a web interface.  
- Admin and IT staff can manage users, track activity, and generate reports.  
- Interface must be web-based, responsive, and mobile-friendly.

## Assumptions

- Customers have basic access to internet-enabled devices.  
- Secretaries are trained in using the system dashboard.  
- The DMV will continue to provide updated content via an accessible channel.  
- The system may use standard email protocols for password recovery.

## Limitations

- The initial version will not allow staff to add or modify training packages without developer support.  
- Future integration with DMV content may depend on external APIs or file uploads.  
- System features will be limited by the budget and timeframe set in the Gantt chart.  
- Users without internet access may have limited system functionality offline.

## Gantt Chart

Figure 1. Gantt chart for DriverPass project schedule based on stakeholder interview.

