**Business Requirements Document**

**System Components and Design**

**Purpose**

The purpose of this project is to design and develop a system for DriverPass that facilitates online driver training. The system will provide online courses, practice tests, and allow students to book in-person driving lessons. Additionally, it will enable administrators to manage schedules, track user progress, and generate reports.

**System Background**

DriverPass aims to improve the pass rate of students taking their driving tests at the DMV by offering structured training programs. The system needs to support online learning, test-taking, appointment scheduling, and tracking student progress. Additionally, administrators must have access to user activity and scheduling data.

**Objectives and Goals**

* Enable customers to register for accounts and access training materials.
* Provide a scheduling system for in-person driving lessons.
* Offer online practice tests with real-time progress tracking.
* Ensure secure authentication and role-based access control.
* Generate reports for tracking user activities and scheduling.
* Maintain compliance with DMV regulations.

**Requirements**

**Nonfunctional Requirements**

**Performance Requirements**

* The system shall be web-based and optimized for mobile and desktop browsers.
* The system should handle concurrent users accessing training materials without performance degradation.
* Reports should generate within 5 seconds.

**Platform Constraints**

* The system shall run on cloud-based infrastructure to minimize on-premise maintenance.
* It should be compatible with Windows, macOS, and Linux environments.
* Backend must support a relational database (e.g., MySQL, PostgreSQL).

**Accuracy and Precision**

* User roles must be clearly defined to prevent unauthorized access.
* The scheduling system must prevent double booking of instructors or vehicles.
* User inputs should be validated to prevent data inconsistencies.

**Adaptability**

* Admins should be able to disable training packages without modifying code.
* The system should allow easy updates to DMV rules and regulations.
* User permissions must be adjustable via an admin panel.

**Security**

* Users must authenticate via username and password.
* The system shall log all changes made by users for audit purposes.
* If multiple failed login attempts occur, the account will be temporarily locked.
* Password recovery must be implemented securely.

**Functional Requirements**

* The system shall allow customers to register, log in, and access training materials.
* The system shall enable users to schedule, modify, and cancel driving appointments.
* The system shall track user progress on practice tests and display results.
* The system shall generate reports on student performance and scheduling.
* The system shall restrict access based on user roles (e.g., admin, instructor, student).

**User Interface**

* The UI should be responsive and support both desktop and mobile browsers.
* Students should be able to view training materials, test scores, and lesson schedules.
* Admins should have dashboards for managing students, instructors, and reports.
* A customer support contact form should be available

**Assumptions**

* Users will have internet access to use the system.
* The system will only support English at launch.
* Students will provide accurate personal details during registration.

**Limitations**

* Customization of training packages requires developer intervention.
* System performance is dependent on third-party cloud hosting.
* Limited to integrating with DMV-provided updates only.

