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 **CS 255 – System Analysis and Design**  
 **Project One: Business Requirements Document**  
 **DriverPass System**  
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**System Components and Design**

**Purpose**

- The purpose of this system is to provide a complete training experience for customers preparing for their driving test, including online practice exams, scheduling driving lessons, and tracking progress.  
- The client, DriverPass, wants a system that allows students to take practice tests, book driving lessons, and track progress with ease.  
- The system must support both web and mobile access to accommodate users on various devices.

**System Background**

- DriverPass identified a gap in the market due to the high DMV test failure rate.  
- The company aims to provide flexible, cloud-based tools for training, scheduling, and feedback.  
- The system must support multiple user types and handle package options, scheduling, and DMV integration.

**Objectives and Goals**

- Enable online scheduling and cancellation of driving lessons.  
- Provide real-time access to practice test results and driving progress.  
- Allow IT admins to manage roles, reset passwords, and oversee account access.  
- Ensure flexibility for future package updates and secure payment processing.

**Requirements**

**Nonfunctional Requirements**

**Performance Requirements**

- The system must be accessible via web browsers and mobile devices.  
- It should be hosted in the cloud with high availability and minimal downtime.  
- System performance must support concurrent users without lag or error.

**Platform Constraints**

- Web-based/cloud-based system.  
- Back end must support integration with DMV updates and relational databases.  
- Must support secure logins and encrypted data storage.

**Accuracy and Precision**

- Role-based access must be enforced.  
- Admins must be notified of failed login attempts or errors.  
- Inputs such as scheduling and test submissions must be logged with time stamps.

**Adaptability**

- IT admin must have access to modify user permissions and disable packages.  
- The system should support updates without requiring downtime.  
- Future customization of lesson packages should be possible by developers.

**Security**

- Role-based access control for students, instructors, secretaries, and IT staff.  
- Secure login with password reset functionality.  
- Encryption of sensitive information, including payment and personal data.

**Functional Requirements**

- The system shall allow students to register, log in, and reset passwords.  
- The system shall allow students to schedule, cancel, and modify lessons.  
- The system shall allow instructors to record driver notes and lesson times.  
- The system shall allow the admin to view and generate activity reports.  
- The system shall allow the secretary to schedule lessons via phone or in person.  
- The system shall support package selection and track progress by session.

**User Interface**

- Interfaces needed for student, instructor, admin, and secretary roles.  
- Mobile-friendly, browser-based interface.  
- Should display progress, test scores, lesson times, and feedback.  
- Easy-to-navigate dashboard for scheduling and user management.

**Assumptions**

- Users have internet access and basic computer literacy.  
- The DMV will provide regular updates to sync with.  
- Packages can be toggled on/off but not added/removed by non-developers.

**Limitations**

- Budget and time constraints limit feature scope to current requirements.  
- Non-developers cannot create or remove lesson packages.  
- Cloud hosting and third-party security measures are assumed.

**Gantt Chart**

