##### **CS 255 Business Requirements Document Template**

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##### **Complete this template by replacing the bracketed text with the relevant information.**

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##### **This template lays out all the different sections that you need to complete for Project One. Each section has guiding questions to prompt your thinking. These questions are meant to guide your initial responses to each area. You are encouraged to go beyond these questions using what you have learned in your readings. You will need to continually reference the interview transcript as you work to make sure that you are addressing your client’s needs. There is no required length for the final document. Instead, the goal is to complete each section based on your client’s needs.**

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##### **Tip: You should respond in a bulleted list for each section. This will make your thoughts easier to reference when you move into the design phase for Project Two. One starter bullet has been provided for you in each section, but you will need to add more.**

##### **System Components and Design**

##### **Purpose**

* The purpose of this proposed system is to create a platform for DriverPass to help students successfully pass their driving tests.
* This system will offer practice tests resembling real test conditions, scheduling options for driving lessons, and tools for tracking progress effectively.
* It aims to increase students' confidence and preparedness for driving tests.

##### **System Background**

* DriverPass seeks to address the problem of students being unprepared for their driving tests, resulting in higher failure rates.
* The system will connect with the DMV to ensure test simulations align with real exam criteria.
* Key features include:
  + Online practice tests that mimic actual driving tests.
  + Scheduling options for in-person driving lessons.
  + Progress tracking with detailed performance reports.
  + Role-specific access levels for students, instructors, and administrators.
* Components:
  + User-friendly interface for all users.
  + Account management system.
  + DMV integration for test criteria alignment.
  + Tools for generating user-level reports and data analysis.

##### **Objectives and Goals**

* **Objectives:** Define measurable outcomes for system functionality:
  + Provide students with realistic practice exams.
  + Facilitate easy scheduling of driving lessons.
  + Enable tracking and feedback on student performance.
* **Goals:** Outline the tasks required to meet objectives:
  + Allow students to create and manage personal accounts.
  + Enable instructors to monitor progress and manage lesson schedules.
  + Ensure administrators can oversee account management and security.

#### **Requirements**

##### **Performance Requirements**

* The system must operate within a web-based environment and be compatible with Chrome, Safari, and Firefox.
* Page load times must not exceed two seconds for seamless user experience.
* Updates should be conducted monthly or as needed to address technical issues and enhance functionality.

##### **Platform Constraints**

* The system must run on Windows, macOS, iOS, and Android platforms.
* Cloud infrastructure will host the system, and a backend database will store user information, test results, and bookings.
* Database management tools will be used to ensure scalability and reliability.

##### **Security**

* Users must log in using secure credentials (username and password).
* All data exchanges between client and server will use HTTPS encryption.
* Accounts will be temporarily locked after five failed login attempts to prevent brute-force attacks.
* The “Forgot Password” feature will allow users to securely reset credentials.
* Additional measures, such as two-factor authentication (2FA), may be implemented for enhanced security.

##### **Functional Requirements**

* The system shall verify user login credentials before granting access.
* The system shall allow users to register for accounts and input necessary details.
* The system shall provide interactive, realistic online driving test simulations.
* The system shall allow students to book, modify, and cancel driving lessons.
* The system shall enable instructors to monitor student progress and adjust lesson plans.
* The system shall generate on-demand performance reports for users.
* The system shall allow administrators to manage user accounts and enforce security measures.

#### **User Interface**

##### **User Needs and Interaction**

* **Students:**
  + Register and manage accounts.
  + Schedule lessons and access practice exams.
  + View progress reports.
* **Instructors:**
  + Manage lesson schedules.
  + Track student progress.
  + Access student performance reports.
* **Administrators:**
  + Oversee user accounts.
  + Manage bookings, cancellations, and updates.
  + Ensure system security and data integrity.

##### **Platform Accessibility**

* The interface must be straightforward, responsive, and accessible via both desktop and mobile devices.
* Responsive design will optimize the experience across different screen sizes.

#### **Assumptions**

* Users will have access to stable internet connections and compatible devices (smartphones, tablets, or computers).
* Students and instructors will adhere to scheduled lessons and utilize the system as intended.
* Administrators will have sufficient technical proficiency to manage account and security tasks effectively.

#### **Limitations**

* Availability of vehicles for driving lessons may restrict the number of concurrent bookings.
* Internet connectivity issues in certain areas may hinder system accessibility.
* Budget and timeline constraints may limit the implementation of advanced features or future scalability.

#### **Reports**

##### **System Reports**

* **Progress Reports:**
  + Generated for students to track their practice test results and driving lesson performance.
  + Includes test scores, areas of improvement, and feedback from instructors.
* **Instructor Reports:**
  + Provide insights into student progress and lesson schedules.
  + Help instructors identify trends and adapt lesson plans.
* **Administrative Reports:**
  + Offer system-wide insights on user activity, bookings, cancellations, and performance metrics.
  + Includes data to ensure compliance with security and system functionality.

Gantt Chart

Please include a screenshot of the GANTT chart that you created with Lucidchart. Be sure to check that it meets the plan described by the characters in the interview.

