**CS 255 Business Requirements Document Template**

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

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.

**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**

*What is the purpose of this project? Who is the client and what do they want their system to be able to do?*

* The purpose of the DriverPass project is to design and build a system that allows students to register for driving lessons, schedule tests, and receive feedback on their driving performance. DriverPass aims to reduce failure rates in driving tests by offering both online and on-the-road training. The system will handle user accounts, lesson scheduling, and reporting.

**System Background**

*What does DriverPass want the system to do? What is the problem they want to fix? What are the different components needed for this system?*

* DriverPass wants to provide students with a comprehensive platform that offers driving lessons, practice tests, and real-time feedback. The problem they want to address is the high failure rate of driving tests due to poor preparation. Components of the system will include user accounts, lesson scheduling, test-taking capabilities, and progress tracking for instructors and students.

**Objectives and Goals**

*What should this system be able to do when it is completed? What measurable tasks need to be included in the system design to achieve this?*

* This system should allow students to schedule lessons, track their progress, and receive test results in real-time. Measurable tasks include the ability to book lessons, view test results, and access feedback from instructors. Administrators should be able to manage user roles and disable packages when needed.

**Requirements**

**Nonfunctional Requirements**

*In this section, you will detail the different nonfunctional requirements for the DriverPass system. You will need to think about the different things that the system needs to function properly.*

**Performance Requirements**

*What environments (web-based, application, etc.) does this system need to run in? How fast should the system run? How often should the system be updated?*

* The system needs to run as a web-based application that can handle up to 5,000 users simultaneously. Page load times should be under 2 seconds, and test results must be available immediately after completion. Updates to the system should be performed bi-monthly.

**Platform Constraints**

*What platforms (Windows, Unix, etc.) should the system run on? Does the back end require any tools, such as a database, to support this application?*

* The system should run on Windows, Unix, and macOS platforms. The back-end will require a cloud-based database (e.g., AWS or Azure) to support the application.

**Accuracy and Precision**

*How will you distinguish between different users?* *Is the input case-sensitive? When should the system inform the admin of a problem?*

* Each user will be identified by a unique email address and password. All input will be case-sensitive, and the system should notify administrators of any suspicious activity, such as repeated login failures.

**Adaptability**

*Can you make changes to the user (add/remove/modify) without changing code? How will the system adapt to platform updates? What type of access does the IT admin need?*

* The system should allow user roles to be changed without altering the underlying code. Administrators must have full access to manage accounts and track system performance. The system should be adaptable to platform updates without downtime.

**Security**

*What is required for the user to log in? How can you secure the connection or the data exchange between the client and the server? What should happen to the account if there is a “brute force” hacking attempt? What happens if the user forgets their password?*

* Users must log in with secure credentials. Data exchanges between the server and client will be encrypted using SSL/TLS protocols. If a brute-force attack is detected, the account will be locked for 24 hours. Password reset functionality will be available for users.

**Functional Requirements**

*Using the information from the scenario, think about the different functions the system needs to provide. Each of your bullets should start with “The system shall . . .” For example, one functional requirement might be, “The system shall validate user credentials when logging in.”*

The system shall validate user credentials during login.  
The system shall allow students to schedule driving lessons.  
The system shall provide real-time test results after completion.  
The system shall enable administrators to disable lesson packages as needed.

**User Interface**

*What are the needs of the interface? Who are the different users for this interface? What will each user need to be able to do through the interface? How will the user interact with the interface (mobile, browser, etc.)?*

* The interface must be user-friendly and accessible through both web browsers and mobile devices. Students should be able to log in, book lessons, view test history, and receive instructor feedback. Instructors should have access to track student progress and leave feedback. Administrators should be able to manage user roles and system settings.

**Assumptions**

* *What things were not specifically addressed in your design above? What assumptions are you making in your design about the users or the technology they have?*
* It is assumed that users will have access to a stable internet connection and modern web browsers (Chrome, Firefox, Safari). Additionally, it is assumed that the DMV will provide updated test questions and requirements, which will be integrated into the system.

**Limitations**

*Any system you build will naturally have limitations. What limitations do you see in your system design? What limitations do you have as far as resources, time, budget, or technology?*

* Budget constraints may limit the extent of initial user testing. In addition, the system may not support legacy browsers or devices. Customization of lesson packages will require developer intervention

**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.*

[Insert chart]

