# 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 this project is to design a comprehensive system for DriverPass, a company aimed at improving driver training and preparation for driving tests at local departments of motor vehicles (DMV). DriverPass wants their system to facilitate online practice exams and on-the-road training for students to enhance their driving skills.

### 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 aims to address the need for better driver training by providing online classes, practice tests, and on-the-road training. The system should enable users to access training materials online, schedule driving lessons, track their progress, and interact with instructors efficiently. Key components of the system include user registration, scheduling, lesson tracking, online materials access, and administrative tools for managing accounts and content.

### 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?*

* Enable users to access online classes, practice tests, and training materials.
* Facilitate scheduling of driving lessons, including online booking and modification.
* Provide a comprehensive tracking system for lesson progress and instructor feedback.
* Ensure system flexibility to accommodate future updates and customization.
* Maintain compliance with DMV regulations and standards.
* Enhance user experience through a user-friendly interface and seamless functionality.

## 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 should run smoothly on web-based platforms and mobile devices.
* Response time for user interactions should be minimal, ensuring a seamless experience.
* Updates to the system should be performed regularly to ensure content and functionality remain current.

#### 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 smoothly on web-based platforms and mobile devices.
* Response time for user interactions should be minimal, ensuring a seamless experience.
* Updates to the system should be performed regularly to ensure content and functionality remain current.

#### 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?*

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#### 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?*

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* Updates to the system should be performed regularly to ensure content and functionality remain current.

#### 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?*

* The system should run smoothly on web-based platforms and mobile devices.
* Response time for user interactions should be minimal, ensuring a seamless experience.
* Updates to the system should be performed regularly to ensure content and functionality remain current.

### 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 allow users to access data both online and offline for flexibility in usage.
* The system shall prevent data modification or updates when offline to avoid data redundancy.
* The system shall allow users to download reports and information for offline work, such as using Excel.
* The system shall implement role-based access control to manage different user roles and permissions.
* The system shall allow the IT officer to have full access to all accounts for maintenance and security purposes.
* The system shall track user activities and changes made to records for auditing and accountability.
* The system shall generate activity reports to identify users responsible for specific actions or changes.
* The system shall allow customers to make reservations for driving lessons online or via phone.
* The system shall support different packages for driving lessons with varying hours and additional content.
* The system shall enable customization of lesson packages in the future to adapt to changing business needs.
* The system shall provide a secure registration process, including capturing customer information and payment details.
* The system shall support automatic password reset for users who forget their passwords.
* The system shall integrate with the DMV system to stay updated with current rules, policies, and test materials.
* The system shall notify users of updates from the DMV and maintain compliance with regulatory requirements.
* The system shall run on the web, preferably on the cloud, to ensure accessibility and minimize technical issues.
* The system's interface shall provide clear progress tracking for tests, lessons, and user activities.
* The system's interface shall include input forms for user information, contact, and appointment scheduling.
* The system's interface shall reflect the company's branding and include intuitive navigation for user convenience.

### 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 owner (Liam) should have access to data reports, activity tracking, reservations, and system customization options.
* The IT officer (Ian) should have access to account management, security settings, system maintenance, and updates.
* The secretary should have access to appointment scheduling, customer information, and communication tools.
* Customers should have access to registration, reservations, progress tracking, test materials, and contact options.
* The interface should be web-based, accessible from any device with internet connectivity.
* The interface should have a user-friendly design with clear navigation, form fields, buttons, and progress indicators.
* The interface should incorporate branding elements, colors, and visuals consistent with DriverPass's image.
* The interface should include interactive elements for appointment scheduling, test progress tracking, and feedback submission.

### 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?*

* Users have access to stable internet connectivity for online system usage.
* Users have standard web browsers and devices compatible with the system's interface requirements.
* The system will be hosted on a reliable cloud platform to ensure availability and security.
* Users will provide accurate and valid information during registration and appointment scheduling.
* The system will adhere to data protection regulations and implement encryption for sensitive data.
* Users will follow security guidelines and best practices to protect their accounts and information.

### 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?*

* Dependence on internet connectivity for online functionality, which may affect users in areas with poor network coverage.
* Compatibility issues with older web browsers or devices not meeting the system's technical requirements.
* The need for regular updates and maintenance to address security vulnerabilities and system improvements.
* Potential challenges in integrating with external systems, such as the DMV, due to system changes or API updates.
* Limited scalability in handling a sudden influx of users or increased data storage requirements without proper infrastructure planning.
* Budget constraints may limit the implementation of advanced features or extensive customization options.
* Time constraints may impact the development and testing phases, requiring prioritization of essential functionalities.
* User training and support may be needed to familiarize users with the system's features and usage guidelines.

### 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.*

*A diagram with a number of steps

Description automatically generated with medium confidence*