# 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 and implement a web-based system for DriverPass, a company that specializes in helping customers prepare for their driving tests. The system will allow customers to register, schedule lessons, track progress, and access learning materials online. DriverPass wants a flexible, user-friendly solution to improve customer engagement and streamline business operations.

### 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 fill a gap in driver education by offering online classes, practice tests, and on-the-road training. The current lack of cohesive scheduling and progress-tracking tools creates inefficiencies. Key system components include a secure database for managing customer and lesson data, user-friendly interfaces for different roles (customers, administrators, secretaries, and drivers), and robust scheduling features that handle lesson reservations and package customization.

### 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?*

* Provide a secure and intuitive platform for customers to book lessons and access educational content.
* Allow administrators to manage user accounts, lesson schedules, and driver assignments.
* Enable progress tracking for customers, displaying completed lessons, scores, and overall progress.
* Ensure scalability for future updates, including new driving packages or features.

## 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 must operate on a web-based platform, processing user actions (e.g., booking lessons) within 5 seconds. Updates should occur bi-weekly to maintain compatibility with DMV regulations.

#### 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 will be hosted in the cloud, accessible through modern web browsers. A secure database backend will support real-time data management.

#### 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?*

* User input, such as login credentials and lesson preferences, must be case-sensitive and validated for accuracy. Administrators will be alerted to scheduling conflicts or login failures after three attempts.

#### 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 will allow IT admins to manage user roles and permissions dynamically without direct code changes. Package updates, such as enabling or disabling packages, will be easily configurable.

#### 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?*

* All user data will be encrypted during transmission. Accounts will lock after three failed login attempts, requiring an administrator to reset access. Password recovery will include multi-factor authentication.

### 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 allows users to register and log in securely.
* The system shall enable customers to schedule, modify, or cancel lessons.
* The system shall track customer progress, displaying completed and pending lessons.
* The system shall allow administrators to manage user roles, reset passwords, and monitor activities.
* The system should provide secretaries with tools to assist customers with lesson scheduling and package selection.

### 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.)?*

* A dashboard for customers to view progress, upcoming lessons, and account details.
* An administrator panel for managing accounts, lesson schedules, and driver assignments.
* A responsive design to ensure usability across various screen sizes.
* Role-based access, ensuring that users see only the features relevant to their roles.

### 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?*

* All users will have reliable internet access.
* DriverPass will provide the latest DMV regulations for system updates.
* Customers will accurately input required information when registering or booking lessons.

### 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?*

* Initial implementation will not include functionality for non-technical staff to modify packages.
* Dependence on cloud hosting means system availability could be affected by provider outages.
* Budget constraints may limit the inclusion of advanced features like real-time vehicle tracking.

### 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.*

