# 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 project is to develop a comprehensive system for DriverPass, focused on training and preparation for driving tests. The system is designed to manage various aspects of the service such as online classes, practice tests, and training reservations.
* The client DriverPass, led by Liam, aims to fill gaps in the market by providing effective driver training to be sure they are prepared for tests. The system should be usable online and offline.

### 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?*

* The system should allow clients and employees to manage appointments and streamline training. It will need to be able to store data efficiently, download reports to devices, upload information, have gps functionality, function with a bank to show pay stubs for employees, and more. The problem they want to solve is fulfilling a gap in the market for an application to streamline new driver instruction.

### 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?*

* The system should be usable online and offline with different functionalities, with a focus on online data modification to avoid redundancy.
* Different levels of access and permissions based on roles within the company, like IT officers and secretaries.
* Ability to track changes made in the system, especially for reservations. It should be able to generate various reports.
* Customers should be able to make reservations for driving lessons online or through direct contact. The system should manage the scheduling of lessons, including instructor and vehicle allocation.
* Ability to offer various training packages and modify them as needed.
* Handling customer information, including personal details and credit card information. It should have pick up and drop off locations.
* It should be compliant and auto updated with DMV rules.
* The system should be cloud based, focusing on minimal technical issues for the business.
* A detailed interface for test progress, driver notes, and seeable information.

## 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 be web-based, accessible on various devices, with a responsive design to ensure credibility across all desktop and mobile platforms. Updates should be automatic and frequent to keep everything current with technological improvements.

#### 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 be cloud-hosted and capable of running on multiple platforms. Windows, ios, linux, mac, etc.

#### 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?*

* Different user roles must be clearly defined and managed so they can accomplish what is necessary and no more. Roles will be implemented such as owner, IT officer, customers, etc. Admins will have whole control over the system.

#### 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 for easy updates to user roles and training content without huge extensive code changes. It must integrate with DMV updates easily. Similar to the voice call platform discord, using the application you can change user roles within a server without changing code.

#### 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?*

* An authentication mechanism for login, using whole password functionality including reset passwords to email. Data encryption for sensitive information is very important, especially for addresses, names, and payment information. It must also have protection against brute force attacks.

### 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 schedule, modify, and cancel future appointments online.
* The system shall offer various training packages and allow for the customization of training by administrator per request by customer.
* The system shall track and record all user activities, including reservations and clear audit trails. Audits allow for constant recording of use for security and debugging purposes.
* The system shall manage user information securely such as personal and payment details.

### 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 intuitive and accessible. All users should be able to use it including less tech savvy individuals. It needs strong mobile and desktop browser functionality. The layout should be clean similar to an iOS interface.

### 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 reliable internet access for online functionalities. The system also will change depending on how the DMV changes.

### 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?*

* The system will not support offline modifications to prevent data changes, similar to an online video game. The cloud platform will be more expensive.

### 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 white sheet of paper with black text

Description automatically generated