# 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 goal of this project is to create an accurate system for DriverPass that will improve driver education. Liam, a client, wants to close the existing gap in the market by offering online practice tests and in-car training to people getting ready for driving exams.

### 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 the system to support on-road training sessions, practice exams, and online courses. DriverPass aims to address the high percentage of driving license exam failures resulting from insufficient instruction. This system requires the following components: reservation management, user roles and access controls, online course modules, practice test functions, and interaction with the DMV for updates.

### 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 practice exams and online courses with an intuitive user interface. Enable the ability to schedule driving lessons online. Establish a system for tracking reservations, user activity, and lesson specifics. Allow training package customization for future adaptability. Make sure the data is accessible both online and off. Create a secure system with varying levels of access control and user roles. Get in touch with the DMV to receive current updates on laws, guidelines, and model inquiries.

## 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 function in a web-based setting that is accessible from multiple platforms. For online users, it should offer responsive and effective performance. Updates and data retrieval ought to go smoothly with little interruption. The system needs to support many users at once without experiencing any performance issues. Regular updates—at least one every two weeks—are necessary to guarantee that the most recent features and training materials are included.

#### 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?*

Cloud-based web platforms are the ideal choice for the system's operation. End users are not subject to any particular restrictions on operating systems (Windows, Unix, etc.). For the back end to handle user data, reservations, and training materials, a secure database is necessary.

#### 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?*

Role-based user authentication needs to differentiate between various users. Passwords and other sensitive data should be handled with care. In the event that there is any suspicious behavior or unauthorized access, the system should notify the administrator right away.

#### 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?*

There is flexibility in that user roles can be modified without requiring changes to the code. Platform changes must be able to effortlessly implemented into the system without impairing its functionality. To update, manage, and make changes to the system, the IT administrator needs complete access.

#### 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?*

A username and password combination is needed for user login. Using encryption techniques, the client server connection should be protected. An account should be temporarily locked out in the event of a hacking attempt. When a user forgets their password, an automated password reset feature should be available to them, after a safe authentication procedure.

### 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.”*

* [Insert text]

### 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 system shall:

Cater to different users, including Liam (the owner), Ian (IT officer), and the secretary.

Allow Liam to access data online and offline, download reports, and work on them using external tools like Excel.

Provide the secretary with functionalities for scheduling appointments, modifying reservations, and contacting users.

Grant Ian, as the IT officer, full access over all accounts to manage passwords and user roles.

Enable users to interact with the interface through web browsers on various devices, ensuring accessibility and flexibility.

### 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?*

The system assumes that:

Users have reliable internet access for online functionalities.

Users will provide accurate and necessary information for appointment scheduling.

The DMV will consistently provide timely updates on rules, policies, and sample questions.

### 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 has limitations such as:

Modifications to training packages may require developer intervention.

Initial focus on essential features; additional features may be considered for future releases.

Resource limitations may impact the speed of updates and feature additions.

The system design assumes a standard level of technology literacy among users.

### 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 graph of a gantt chart

Description automatically generated*