# 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 system for the clients Liam and Ian at DriverPass. They want a system that will help prepare driving students for their driving tests due to the high number of students that fail. By doing so, DriverPass aims to give students access to online classes and practice 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 have the ability to handle access to data both online and offline. Ian thinks that running the system off the web over the cloud would be the best option for them, this way back up and security are handled. The client also wants different levels of data access for employees, and to include a reservation system for scheduling driving lessons.

### 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?*

* For students, the system should allow access to online classes and practice tests. They should also have the option to make, change, and cancel reservations for driving lessons online, and to be able to reset passwords automatically. It should include an interface that tracks test progress, driving lesson times, information and special needs, ID photos, and driver comments. For employees, the system needs to allow offline data access and provide different levels of access based on their different roles, and to track changes for reservations, cancellations, and modifications. The system should also allow for the downloading of activity reports. Additionally, it is a must to be connected to the DMV so it can stay up to date with rules, policies, and sample questions.

## 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 be web-based.
* The system should be able to run efficiently for all users.
* Updates should happen often to make sure data is secure and it is running correctly and smoothly.

#### 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 able to run on all major platforms such as Windows, Unix, and macOS.
* The back end will require a database to allow and secure data storage and 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 roles will be implemented to distinguish different users.
* Input should be case-sensitive to allow more precision.
* The system should inform the admin if there are any security breaches or if data has any errors.

#### 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?*

* User roles and permissions will be easily manageable through the system interface without the need for any code changes.
* The system should be able to adapt to platform updates with minimal disruption to the users.
* The IT admin should have complete access to the ability to manage the system, edit user roles, and reset passwords.

#### 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 are required to log in using their username and password.
* Connection and data exchange can be secured through data encryption.
* Lock accounts if there are multiple failed login attempts to prevent brute force hacking.
* Allow a password reset option with user authentication in case users forget their passwords.

### 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 each time they log in.
* The system shall allow users to schedule, modify, or cancel their driving lessons.
* The system shall provide access to online practice tests and track their progress.
* The system shall allow users the ability to generate and download reports.
* The system shall log user activities and changes.

### 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 needs to be user-friendly and accessible through a web browser.
* The users are admin, IT, secretary, and students.
* The admin will manage users, view data reports, and track activities.
* The IT will maintain the system, edit user roles, and reset passwords.
* The students can schedule lessons, take online tests and courses while viewing their progress.
* Users will be able interact with the interface on a web browser on desktop, and mobile.

### 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 assumption that the users have access to and the ability to use a web browser and an internet connection.
* The assumption that the system will be designed mostly for online use.

### 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?*

* A need for internet connection for system access.
* A budget that may restrict certain features.
* Time constraints impacting the development and testing.
* Integration with DMV systems for any recent updates.

### Gantt Chart

*A graph with a diagram

Description automatically generated with medium confidence*