# 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 DriverPass that allows students to schedule driving lessons, take online practice tests, and receive driving instruction both online and in-person.
* The client, DriverPass, wants a system that supports reservations, package customization, reporting, and user access from anywhere via web or mobile.

### 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 is addressing a gap in the market where most students fail driving tests due to poor preparation.
* The system must manage driving lesson reservations, online class tracking, user account roles, and secure access to data.
* Required components include a scheduling module, reservation system, online test tracker, driver notes, user management, and admin tools.

### 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:
* Allow students to create, modify, and cancel reservations online.
* Enable admins to reset passwords, block accounts, and generate activity reports.
* Allow tracking of test progress and driver comments.
* Provide secure, web-based access for all users.
* Integrate with DMV updates for compliance.

## 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 run in web and mobile environments.
* It should load within 2 seconds and allow concurrent users.
* Data should be updated in real-time with minimal lag.

#### 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 on all major browsers.
* It must support backend services using a cloud-hosted database.
* Compatible with Windows, macOS, Android, and iOS platforms.

#### 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 must be clearly defined and restricted.
* Case-sensitive login credentials.
* Admins should be notified of failed login attempts or password resets.

#### 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?*

* Admins should be able to enable/disable packages without code changes.
* System should handle platform updates automatically via cloud provider.
* IT admin should have full access to user management tools.

#### 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?*

* Secure login with encrypted credentials.
* HTTPS used for all client-server communications.
* Lock account after multiple failed login attempts.
* Self-service password reset option.

### 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 register and schedule driving lessons.
* The system shall track user test scores and lesson progress.
* The system shall allow admins to reset or block accounts.
* The system shall let customers modify or cancel appointments online.
* The system shall track and log all user activity (create/edit/delete).
* The system shall connect with DMV to receive rule updates.

### 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 must support different users: customers, secretary, admin, and IT.
* Users will access the system through a browser or mobile device.
* Customers need to see progress on lessons and tests.
* Admins need access to system settings and user reports.

### 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?*

* It is assumed that users will have internet access and basic digital literacy.
* It is assumed that users will primarily access the system through a browser.
* DMV will provide updates in a compatible format.

### 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?*

* Limited to web-based application with no current offline modification support.
* Budget may not support complex analytics or real-time DMV syncing.
* User package customization will require developer assistance in early versions.

### 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.*

[Insert chart]