# 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 develop a comprehensive system for DriverPass, a company aiming to provide better driver training services.
* DriverPass wants the system to handle online classes, practice tests, on-the-road training sessions, and appointment scheduling for its customers.
* The client, DriverPass, wants the system to be accessible online and offline, allowing data access from any computer or mobile device.

### 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 address the need for improved driver training services, especially considering the high failure rates in driving tests at DMVs.
* The system should offer online classes, practice tests, and on-the-road training sessions.
* It should facilitate appointment scheduling, track user activities, manage different user roles, and provide data security.
* Components needed include online classes, practice test modules, appointment scheduling features, user management functionalities, and robust security measures.

### 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 enable customers to access online classes, practice tests, and schedule driving lessons conveniently.
* It should track user activities, manage user roles, and ensure data security.
* Measurable tasks include:
  + Providing online classes and practice tests accessible from any device.
  + Allowing users to schedule, modify, and cancel driving appointments online.
  + Tracking user activities for accountability and auditing purposes.
  + Implementing user roles and permissions to manage access effectively.
  + Ensuring data security measures to protect sensitive 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 should run smoothly in web-based environments.
* Response times should be quick to provide seamless user experiences.
* Updates should be scheduled periodically to ensure system reliability.

#### 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 multiple platforms including Windows, macOS, and mobile platforms.
* Back-end requirements may include database management systems such as MySQL or MongoDB.

#### 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 inputs should be accurately processed and validated.
* System alerts should notify administrators promptly of any issues.
* User identification should be case-sensitive for accurate authentication.

#### 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 user management without code changes.
* It should adapt to platform updates seamlessly.
* The IT admin should have full access for system maintenance and troubleshooting.

#### 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?*

* User login should require secure authentication methods.
* Data exchange should be encrypted to ensure privacy.
* Accounts should be locked after repeated failed login attempts.
* Password reset functionality should be available for users who 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 when logging in.
* It shall allow users to schedule, modify, and cancel driving appointments.
* It shall track user activities including reservations, modifications, and cancellations.
* It shall provide different user roles with varying levels of access.
* It shall ensure data integrity and security measures.

### 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 should be user-friendly and accessible across various devices and platforms.
* Different users including customers, administrators, and IT personnel should have tailored interfaces.
* Users should be able to interact with the interface via web browsers and mobile applications.

### 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 access to standard web browsers or mobile devices.
* It assumes that users have basic knowledge of internet usage and can navigate through the system interface.
* Assumptions include the availability of stable internet connections for online interactions.

### 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?*

* Limitations include potential constraints in terms of resources, particularly development time and budget.
* Technology limitations may arise concerning compatibility with older devices or browsers.
* The system's scalability and performance under heavy loads may present challenges.

### 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.*

