# 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 project's purpose is to develop a comprehensive system for DriverPass, aimed at enhancing driver training efficiency. The system is intended to facilitate online and offline access to driving training materials, manage reservations for driving lessons, and ensure compliance with the latest DMV standards. DriverPass, the client, wants a system that supports their vision of improving driver training and reducing the high failure rates in DMV driving tests.

### 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 for the system to streamline the process of preparing students for their driving tests. The problem they seek to address is the lack of adequate preparatory tools for driving tests, leading to high failure rates. Key components needed include an online platform for classes and tests, a reservation system for practical driving lessons, and a backend management system for user data, scheduling, and DMV compliance 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?*

* Upon completion, the system should:
  + Enable users to access and download training materials both online and offline.
  + Allow customers to make, cancel, and modify reservations for driving lessons online.
  + Track user activities and changes within the system.
  + Update content in accordance with DMV changes.
  + Manage different user roles and access rights.
  + Offer various driving training packages with flexibility for future modifications.

## 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 be primarily web-based, accessible through various devices (desktops, laptops, tablets, smartphones).
* It should perform efficiently, with minimal latency, especially in the reservation process.
* Regular system updates are necessary for security, performance optimization, and DMV compliance.

#### 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 operable across multiple platforms, including Windows and Unix/Linux systems.
* The backend should incorporate a reliable database for data storage and management, possibly using cloud-based services for scalability and security.

#### 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 distinction will be based on unique login credentials and role-based access control.
* The system should employ mechanisms to detect and alert admins of unusual activities or errors.
* Input fields may be case-insensitive where applicable to avoid user 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?*

* The system should allow for user role modifications (add/remove/modify) without needing code changes.
* It should adapt seamlessly to platform updates and provide comprehensive access for IT admins to manage these changes.

#### 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 procedures, possibly using two-factor authentication.
* Encrypted data exchange between client and server to protect sensitive information.
* In case of brute force attacks, the system should temporarily lock the account and alert the admin.
* Automated password reset options 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 manage online and offline access to training materials.
* The system shall enable efficient online reservation management for driving lessons.
* The system shall maintain a detailed log of user activities and system changes.
* The system shall provide updated content in line with DMV regulations and 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 interface needs to be intuitive and user-friendly for various user types (admin, IT officer, secretary, customers).
* Admins need comprehensive access to system controls; customers require easy navigation for lesson reservations and material access.
* Interaction with the system will primarily be through web browsers, optimized for both desktop and mobile platforms.

### 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?*

* Assuming users have basic internet literacy and access to internet-enabled devices.
* Assuming cloud services used for the system are reliable and offer high uptime.

### 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?*

* System updates and modifications might require technical expertise (IT personnel involvement).
* Limited by the project's budget, time constraints, and current technology's capabilities.

### 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]

A blue and white chart

Description automatically generated