# 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 develop a robust web-based system for DriverPass, a company focused on providing online driving education and test preparation services.
* The client is DriverPass and they want a system that allows users to schedule driving lessons, access learning materials, and track progress effectively.

### 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 streamline the process for new drivers to obtain their licenses by offering an intuitive system for booking lessons, accessing driving resources, and preparing for exams.
* The main problem to fix is the inefficiency in booking driving lessons and accessing necessary resources, currently causing delays and poor user experience.
* The key components: A user-friendly interface, admin interface, and a back-end system to handle data.

### 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?*

* Register and create profiles
* schedule driving lessons
* access educational materials
* Track progress in lessons and test preparations.

## 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 operate as a web-based application, accessible via modern browsers on both desktop and mobile devices.
* It should respond to user actions within 2 seconds.
* The system should be updated bi-weekly for maintenance and improvements.

#### 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 must run on Windows, macOS, and Linux platforms, as well as support iOS and Android devices for mobile access.

#### 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?*

* System distinguishes between users with separate login sections.
* Input fields (like usernames and passwords) will be case-sensitive.

#### 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 information can be added, removed, or modified through an admin panel without the need to change the underlying code.
* IT admin will have access to user management, lesson scheduling, and content updates.

#### 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 will be required to log in using a verified email and a secure password (minimum 8 characters, including symbols).
* The system will lock the account after 5 unsuccessful login attempts to prevent brute-force attacks and send an alert to the admin.
* If a user forgets their password, a password reset link will be sent to their registered email.

### 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.
* Allow students to schedule, reschedule, and cancel lessons.
* Provide access to educational resources based on the user's progress.
* Track user progress and store test results.
* Allow admins to add, remove, or modify user profiles and lessons.
* Notify users and admins of upcoming scheduled lessons and any 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 simple and intuitive, with a dashboard view for both students and admins.
* Users will interact with the system primarily through forms, buttons, and dashboard views.

### 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?*

* Users have basic knowledge of computer and mobile device usage.
* The system assumes stable internet connectivity for optimal performance.
* It is assumed that the user base will primarily be students looking for driver's education and instructors managing lessons.

### 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?*

* Technology limitations include ensuring cross-browser compatibility and supporting both desktop and mobile access.

### 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.*