# 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 the DriverPass system is to provide an online platform for students to access practice exams and receive on-the-road training to prepare for their driving tests. This system aims to streamline the learning process, making it easier for users to schedule lessons, track their progress, and receive high-quality driving instruction. The system will also allow for easy integration with existing services and ensure a smooth user experience.

### 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 a new company offering online driving education services. The system will enable users to schedule lessons, take practice exams, and receive feedback on their performance. The system will be cloud-based and accessible through both computers and mobile devices. It will interact with the central database for lesson scheduling, user progress tracking, and exam results. Additionally, it will need to provide administrative functionality for managing user accounts and lesson offerings.

### 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?*

* **Objective 1**: Provide students with access to practice exams and driving lessons.
* **Objective 2**: Allow users to book and schedule lessons online.
* **Objective 3**: Track user progress through exams and lessons.
* **Objective 4**: Provide administrative tools to manage users, lessons, and driving instructors.
* **Goal 1**: Ensure a user-friendly interface with easy navigation for students and administrators.
* **Goal 2**: Implement secure user authentication and data management.
* **Goal 3**: Integrate with the central bank’s system for handling payments (if applicable).

## 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 respond to user inputs within 5 seconds.
* Data retrieval from the central database should not exceed 10 seconds.
* The system should be able to handle 1,000 concurrent users without performance degradation.

#### 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 will be cloud-based and must be compatible with both desktop and mobile browsers (Chrome, Firefox, Safari).
* The system should run on a Windows operating system for administrative 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?*

* The system should correctly verify user credentials (name, email, driving experience).
* The system must accurately track user progress, including test scores and lesson completion.

#### 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 be adaptable to future updates, including the ability to add new lessons, exams, and payment options.
* It should integrate easily with third-party payment systems for processing payments.

#### 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?*

* The system must require a secure login with a unique username and password for each user.
* User data (such as driving records and payment information) must be encrypted both in transit and at rest.
* After three failed login attempts, the system should lock the user’s account and require manual verification to unlock.

### 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 students to create an account and log in securely.
* The system shall allow students to schedule driving lessons and take practice exams.
* The system shall allow administrators to manage student accounts, lesson availability, and exam schedules.
* The system shall allow students to view and track their progress through completed lessons and exams.
* The system shall generate reports on student progress, exam results, and lessons completed.

### 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 shall have an intuitive, user-friendly interface accessible on both desktop and mobile devices.
* The user interface should include:
* A login page with fields for username and password.
* A dashboard for students to view scheduled lessons, upcoming exams, and their progress.
* An administrator dashboard for managing student accounts and lesson schedules.
* A progress tracking page for students to view past lessons and exam results.
* The design should be responsive and easily navigable, with clear calls to action.

### 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 will have a reliable internet connection to access the system.
* Students will have valid, functioning accounts to log in and access their lessons.
* The system will be able to integrate with any third-party services required for scheduling and payments.
* There will be minimal downtime for system maintenance.

### 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?*

* The system will not support offline access; users must be online to access content and schedule lessons.
* The system will initially only support English, with future language support planned.
* The system will not initially offer in-person lessons, only online scheduling and remote feedback.

### 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.*

A diagram of a project

Description automatically generated with medium confidence