# 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?*

DriverPass aims to provide students with comprehensive tools to better prepare for driving tests, including access to online practice exams and on-the-road training scheduling. The system must enhance accessibility and operational efficiency for users and employees.

### 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 needs a robust web-based system accessible from computers and mobile devices. The current issue is the lack of integrated tools for students to adequately prepare for DMV driving tests, leading to a high failure rate. The system should include scheduling, progress tracking, secure user management, and compliance updates from the DMV.

### 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?*

* Provide online practice exams with result tracking.
* Enable students to schedule driving lessons and track session progress.
* Ensure secure access and distinct user roles for administrators, IT officers, secretaries, and customers.
* Support integration for receiving DMV updates.

## 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 shall be web-based and must operate smoothly on computers and mobile devices. It should be capable of handling concurrent requests for scheduling, test-taking, and data management without lag. System updates shall occur quarterly or as needed.

#### 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 shall support major platforms, including Windows, macOS, Android, and iOS. Backend tools will include a secure cloud database.

#### 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 input should be validated for accuracy for example case-sensitive usernames. The system must inform the administrator of errors such as failed login attempts or scheduling conflicts.

#### 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?*

* Administrators should be able to disable packages or features without code changes. The system should accommodate platform updates seamlessly.

#### 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?*

* Multi-factor authentication (MFA) shall be required for users. Data exchange must be encrypted, and brute-force protection measures implemented. Password reset functionality must be available.

### 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 during login.
* The system shall enable users to schedule, modify, or cancel appointments online.
* The system shall track and display user progress on practice exams.
* The system shall allow administrators to generate and download reports.
* The system shall notify users of updates from the DMV.

### 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.)?*

* Users: Students, DMV administrators, IT officers, and workers.
* Needs:
* Students should schedule lessons, take practice tests, and view progress reports.
* Administrators and IT officers must manage user accounts and monitor system activity.
* Workers should schedule lessons on behalf of customers.
* Platforms: Accessible through mobile and desktop browsers.

### 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 internet access to interact with the system.
* The system will interface securely with DMV databases.
* Future features may include additional training packages.

### 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 initial system will not allow non-developers to modify training packages independently.
* Time and budget constraints limit the scope of immediate feature development.

### 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 screenshot of a computer

Description automatically generated