# 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 is a company that wants to help people better prepare for their driving tests. They’re asking for a system that can support online practice exams, in person driving lessons, and appointment scheduling.

• The system should be accessible online and work on computers and mobile devices.

• Our goal is to create a reliable system that helps DriverPass organize their services, manage customer information, and give users the tools they need to book lessons and track progress.

### 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?*

• The big issue DriverPass wants to solve is how unprepared many people are for their DMV driving tests.

• They want to offer a complete learning solution with online content, test practice, and real world driving instruction.

• The system needs to handle user accounts, allow for lesson bookings, manage different training packages, and help staff track who is doing what.

• It also needs to keep up with DMV rule changes and allow users to see their test progress and lesson feedback.

### 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?*

• Let users create accounts and log in securely.

• Allow students to schedule, cancel, and change appointments online.

• Include training packages with different lesson types and materials.

• Let staff track all changes and generate activity reports.

• Provide cloud based access from multiple devices with options to download certain reports.

• Send alerts when DMV updates are available.

• Clearly display student test progress and driver notes through an easy to use interface.

## 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 in a cloud based, web environment and support modern browsers on desktops and mobile devices.

• It should load pages in under 2 seconds and support high traffic from students logging in simultaneously.

• Regular updates should happen monthly, with emergency patches 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 should run on both Windows and macOS via web browsers.

• The backend should be supported by a secure cloud based database (like AWS or Azure) with scalable architecture.

• It should not require local installation on the client side.

#### 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?*

• Users will be separated by account roles.

• Inputs like usernames will be case insensitive, but passwords will be case sensitive.

• The system should notify the IT admin if login attempts fail multiple times or if there are booking 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?*

• User accounts should be managed through an admin dashboard without needing to change the code.

• The system should be browser based, so any updates to OS or devices shouldn't affect it as long as the browser is current.

• The IT admin should have full access to user management, system settings, and reporting tools.

#### 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 log in with a username and password over a secure HTTPS connection.

• If login fails too many times, the account will be temporarily locked and the admin notified.

• Users should be able to reset their password through a secure, automated process via email.

• Data should be encrypted during transmission and stored securely on the server.

### 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.

• The system shall allow students to schedule, modify, and cancel appointments.

• The system shall allow secretaries to book appointments manually.

• The system shall store and display student test progress and scores.

• The system shall let admins track user actions and generate reports.

• The system shall store student and driver information securely.

• The system shall integrate DMV updates and notify admins when new material is available.

### 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 accessible via web browser and mobile devices.

• Students need to be able to sign in, view lessons, check test progress, and manage appointments.

• Admins need to manage users, pull reports, and oversee system settings.

• Secretaries need to manually book and edit appointments.

• Instructors need access to lesson schedules and the ability to leave feedback.

### 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?*

• We assume users will have internet access and a modern browser.

• We assume that DriverPass will supply all training content and keep it DMV compliant.

• We assume admins and IT staff are trained to manage their roles.

### 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?*

• Initial system version may not allow non developers to create or remove packages entirely—only enable/disable them.

• DMV integration may depend on external systems being accessible and updated.

• Budget and timeline may restrict adding extra features like mobile apps at launch.

### 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 calendar

AI-generated content may be incorrect.*