# 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 objective of this project is to develop a system for DriverPass to prepare customers for driving tests with the DMV.
* DriverPass requires an online practice test system, appointment scheduling, lesson scheduling, as well as customer management.

### 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 issue is then a lack of proper training aids; over 65% of test candidates do not pass.
* The system should include online access, practice tests, on-road training, appointment reservations, administration for users, as well as DMV 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?*

* The system must be able to let students register and book lessons.
* They should be given online access together with tracking capabilities.
* Admins and staff should manage users, bookings, and produce reports.
* Security procedures, audit information, as well as DMV policy enforcement, must be instituted.

## 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?*

* Web-based platform, cloud-host
* Should support multiple users simultaneously.
* Should automatically look for DMV updates.

#### 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?*

* It should be accessible through web browsers on Windows, macOS, and mobile devices.
* It requires a secured cloud database back end (AWS, Azure, or Firebase, etc.).

#### 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?*

* Role-based access controls are required.
* All alterations should be documented and traceable (audit trail).
* System should inform admins about changes in bookings or errors in data.

#### 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 must be capable of en-abling/disabling packages.
* System must be capable of updating users or packages without hardcoding.
* IT officer needs total admin privileges for resetting passwords as well as blocking users.

#### 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 need to log in safely.
* Password reset should be automated.
* Systems need to be protected from brute-force logins.

### 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 will permit students to book, as well as change, lesson bookings.
* The system would track what car, driver, and time slot are being used for every session.
* The system would permit three driving packages and would track lesson times.
* The system will retain and display online test progress as well as driver feedback.
* All activity (i.e., updates, cancellations) will be monitored through the system. The system will allow the IT officer to manage user accounts and accesses.
* The system will retrieve DMV updates and notify employees of 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.)?*

* Should be mobile- and browser-compatible.
* Admins (owner, IT officer) need dashboards with system admin tools.
* Secretaries need scheduling and registration software availability.
* Test access, scheduling, and tracking of progress require test accounts from the customers.
* It should have status indicators, reports, and forms with proper labeling.

### 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?*

* Let’s all users will be provided with basic email and internet.
* Customer data is considered to be entered correctly.
* DMV issues updates in a uniform format.

### 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?*

* Nontechnical users can't change system structure with or without developer involvement.
* Budget would preclude high-end customization or scalability at this time.
* DMV integration is assumed to be passive (DriverPass gets updates, not pushes).

### 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.*

