# 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 design an online system for DriverPass that allows customers to:
  + Take online classes and practice driving tests.
  + Schedule on-the-road driving lessons.
  + Access training materials and track progress.
* The system should support different user roles with varying access rights (administrators, IT personnel, secretaries, and customers).

### 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 identified a market need: many students fail DMV driving tests due to inadequate training.
* DriverPass wants a system offering a combination of online preparation (classes and practice tests) and on-the-road training.
* Key components:
  + Online learning modules.
  + Practice tests with tracking.
  + Appointment scheduling for driving lessons.
  + User management (students, secretaries, IT admins).
  + Reporting and tracking of changes and reservations.

### 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?*

* Enable customers to create accounts, register for packages, and schedule appointments.
* Enable secretaries to manage customer appointments manually.
* Enable IT admins to manage user accounts (reset passwords, disable accounts).
* Track all changes made to records (reservations, cancellations, updates).
* Provide flexibility to enable or disable packages without developer involvement.
* Maintain compliance with DMV changes via updates and notifications.

## 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 operate in a web-based environment accessible from computers and mobile devices.
* Data should be accessible online; offline access should allow only local work (such as downloaded Excel reports).
* Updates should be applied monthly 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?*

* Cloud-based platform preferred to minimize maintenance (backup, security handled by service provider).
* Compatible with major web browsers (Chrome, Firefox, Safari, Edge).
* Backend must support integration with a relational 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 authentication must distinguish between different roles.
* Input fields must be case-sensitive where applicable.
* The system must generate admin alerts for unauthorized login attempts and failed reservation transactions.

#### 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?*

* Admins must have access to enable or disable packages without code changes.
* System should handle platform/browser updates with minimal disruption.
* IT admins require full administrative rights to adjust accounts and manage access.

#### 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 must authenticate using a username and password.
* Connection secured with SSL/TLS encryption.
* Implement account lockout after multiple failed login attempts.
* Password recovery system with secure email reset functionality.

### 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 customers to create and manage their accounts.
* The system shall enable customers to register for driving packages.
* The system shall allow customers to schedule, modify, and cancel driving appointments.
* The system shall allow secretaries to manually register customers and input their data.
* The system shall allow IT admins to reset passwords, disable accounts, and monitor activities.
* The system shall track and record all user actions (reservations, cancellations, updates).
* The system shall allow the download of reports for offline work.
* The system shall display online class progress, test results, and driver notes.

### 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.)?*

* ***Customer Interface:***
  + *Register, schedule lessons, view class/test progress.*
  + *Reset passwords.*
* ***Secretary Interface:***
  + *Create, modify, and cancel customer appointments.*
* ***IT Admin Interface:***
  + *Manage user accounts (reset passwords, disable users).*
  + *View audit logs.*
* ***Platform:***
  + *Web-based, mobile-responsive design.*

### 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?*

* All users will have access to a stable internet connection.
* Customers are expected to have a basic understanding of using online forms.
* The system will integrate with DMV updates via a notification system (details TBD).

### 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 design will not allow nondevelopers to add/remove modules (only enable/disable packages).
* Customization of packages (adding new ones) will require system analyst/developer support.
* Budget and resources may limit advanced features like real-time DMV updates.

### 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 graph with colorful squares

AI-generated content may be incorrect.