# 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 and develop a comprehensive system for our client, DriverPass. DriverPass aims to address the lack of effective tools for training students to pass their driving tests. They want the system to provide online driver training, including classes and practice tests, and facilitate on-the-road training. Additionally, the system should support user registration, reservation management, compliance with DMV regulations, and offer a secure, cloud-based infrastructure. The client's goal is to improve the success rate of students in passing their driving tests.

### 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?*

* Provide online driver training, including classes and practice tests.
* Support on-the-road training.
* Enable access to the system online and offline.
* Allow data access from various devices.
* Implement user roles and rights for security.
* Track user activities for auditing purposes.
* Enable online reservation management for driving lessons.
* Support various package options for customers.
* Capture user registration details.
* Stay updated with DMV rules and regulations.
* Offer a user-friendly interface aligning with Liam's provided sketch.
* Be adaptable for future feature additions.

### 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?*

* Improve the pass rate of driving test students.
* Provide effective online and on-the-road training.
* Ensure data security and user privacy.
* Facilitate easy user registration and reservation management.
* Stay compliant with DMV regulations.
* Offer a user-friendly interface for all users.
* Accommodate future feature enhancements.

## 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 be accessible through web-based and mobile platforms.
* It should provide fast response times and smooth performance.
* Updates should be scheduled regularly based on DMV updates and system enhancements.

#### 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 various platforms, including Windows and Unix.
* It requires a robust backend database to support its functionalities.

#### 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 identification should be precise and case-sensitive.
* The system should notify the admin promptly of any issues or anomalies.

#### 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 allow user management (add/remove/modify) without changing the underlying code.
* It should adapt seamlessly to platform updates.
* The IT admin should have full access rights to manage the system.

#### 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?*

* User authentication should be required for login.
* Secure encryption protocols should be implemented for data exchange.
* Account suspension measures should be in place for "brute force" hacking attempts.
* Password recovery options should be available for users who forget their passwords.

### 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.
* It shall provide access to online driver training materials.
* It shall facilitate on-the-road training reservations.
* It shall support different user roles with varying levels of access.
* It shall maintain a comprehensive reservation system.
* It shall allow user registration with necessary details.
* It shall connect with the DMV for updates and notifications.
* It shall feature a user-friendly interface aligned with the provided sketch.
* It shall be designed for future feature additions.

### 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.)?*

* Liam (Owner): Full system access for management.
* Ian (IT Officer): Access for system maintenance.
* Secretary: Access for appointment scheduling.
* Customers: Access for appointment management and training materials.
* Users will interact with the interface via web browsers and mobile devices.

### 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 have internet access and appropriate devices.
* Users have valid personal information for registration.
* DMV updates are regularly available and accessible.

### 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?*

* Limited resources, including time and budget, may impact system development.
* Technology constraints may affect the system's adaptability to future 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.*

