# 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 main purpose of the project is to help new drivers with their driving tests by providing online practice exams and on the road training.
* The client is Driver Pass, and they want their system to be able to handle and access data from anywhere, online or offline as needed. More specifically, they want their clients to be able to make appointments online, in person, or over the phone and have the option to cancel or modify appointments if needed.

### 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?*

* One of their main functions that they want to create is a system that allows clients to book appointments online, over the phone, or in person. To do this though, they need to consider some extra information when booking appointments such as the driving coach that will go out with the client and be able to record that information. In this, they want to utilize a package system that clients can purchase to facilitate how many appointments they have.
* They want a website that can facilitate many features including test taking, booking appointments, etc.
* The different components for the system are some sort of user authentication for the client which can store user information. Another would be some way of storing appointment information to prevent overlaps and overbooking. There needs to be some way for trainers to upload their notes to their clients account menu. There also needs to be a process for handling the online testing. This will have to be constantly revised to go along with DMV rules and regulations.

### 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 should be able to provide clients with a user-friendly interface that will allow them to book appointments, take online exams, and view driving notes from their trainers.
* Some measurable tasks that need to be included are building and researching the UI, linking the DB to the interface, and building the business logic.

## 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?*

* Based on the interview transcript, the system will need to run in a web-based environment ideally over the cloud. The various requirements that the customer wants requires that the application is connected to the internet in some way. The system should be able to handle a decent amount of traffic and should be able to run quickly to allow ease of use for the users. One detail outlined in the interview is that the application will need to be constantly updated to be in accordance with DMV rules and regulations.

#### 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 backend will require some sort of database system to store customer information, authentication, user data, test progression, appointments, and many more things.

#### 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?*

* A database will be required to store user information and be able to distinguish between them when authenticating users. The system should probably inform the admin when customers are having issues accessing their account. The customer wants this done automatically so customers can reset their passwords quickly if needed, but the admin will still need to overwrite the password with the new one.

#### 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?*

* We should be able to add, remove and modify user data as needed. The IT admin should have access to much of this information and can add/remove and modify user data if there are any issues. The system should be adaptable and easy to adjust in the case of platform updates.

#### 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?*

* The user will need an email and password for logging in. If the user is creating an account, they will have to verify their email address. This will be used for account recovery purposes as well. To secure the connection and data exchange, we will need to employ some sort of encryption algorithm to mask this data. If there is a brute force hacking attempt, the account should be temporarily locked down and the customer should be notified via email.

### 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 users to book appointments
* The system shall allow users to take written driving tests
* The system shall allow users to update their data
* The system shall allow users to view notes from their driving tests
* The system shall allow users to reset their password if they forget their password.

### 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 will need to be user friendly for the customers. It should be clear where users can book appointments, view instructor notes, and take online tests to prepare themselves for their driving tests.

### 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?*

* Some assumptions that are being made is that the encryption algorithm that we use will be sufficient to protect user data. Another assumption is that this application can be easily navigated on mobile devices, which will be important in case anyone needs to make a modification to their appointments.

### 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?*

* Major limitations in this system are going to be time and budget. We have only a few months to design this system and the budget can greatly alter the resources we have available when designing this system.

### 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.*

