# 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 to create an application for the client (Driver Pass) that can enhance their core functions of teaching people the rules of the road and how to drive. Their goals for the system are for it to be able to schedule appointments and for students to leave reviews.

### 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?*

* Driver Pass wants the system to reduce fail rates for DMV exams by better educating and preparing new drivers. It intends to do this by providing new drivers a resource with which they can study on their own time at their own pace. In order to make this system successful, it will require a database of DMV rules and regulations, resources for students to learn from, and a way to provide students with optional additional training.

### 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?*

* When the system is complete, users should be able to do the following:

1. Register on the system with a set of credentials
2. Update their user information
3. Set appointments
4. Have full access to all learning materials (Driver Pass, DMV, third-party)

* Driver Pass administrators should be able to do the following:

1. Access the system from wherever, whenever.
2. Grant users permissions in accordance with their roles.

* In order to achieve the above goals, cloud connectivity will probably need to play a big role in the system’s infrastructure.

## 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?*

* According to the given instructions, the system should be web-based, as being cloud-based will allow him to pass the security burden onto the cloud provider.
* The system should be able to run very quickly, as users will need to be able to create appointments and attend online classes in as near to real-time as possible.
* The system should be updated as often as possible as it will need to update with the most recent DMV information as well as class time slot availability.

#### 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 be able to run on Windows, Linux, and macOS so as to reach as many possible users as possible.
* The back end will require a database to keep up-to-date with the DMV’s regulations, as well as to store user data and profiles. The database will be stored in the cloud and serve as a soft back-up.

#### 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?*

* The system will distinguish between users by using a unique ID in the form of a standardized characterized string. These UIDs will be assigned to groups within the system, each user’s group will determine their level of access.
* The input will be case sensitive.
* The system should inform the administrators of a problem any time an error appears.

#### 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?*

* It should be possible to change user profiles and permissions without changing the code.
* The system will require minimal adaptation in response to platform updates as it will be cloud-hosted.
* The IT administrator will require super user access in order to update user accounts and investigate system issues.

#### 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 require a username and password to log in.
* If a user incorrectly enters their password three or more times, their account will become disabled and they will have to reach out to an administrator to have it unlocked. The administrator will then verify their identity before unlocking their account.

### 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 be able to automatically make a reservation upon user request.
* The system shall be able to recognize current users and register new users.
* The system shall be able to provide the user with DMV classes and practice tests.
* The system shall be able to offer all three packages that Driver Pass requested.
* The system shall be able to show the user the car and driver that they have been provided.

### 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.)?*

* Users need to be able to make reservations for driving, classes and to take the exam.
* Users will also need to be able to choose which package they want.
* The interface be able to run a variety of devices, including mobile phones, laptops, and tablets.

### 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?*

* The cost of the system was not specifically addressed by the above design.
* I am assuming that users will at least have internet connectivity, a modern device, and a basic know-how of creating user profiles and navigating GUIs.

### 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?*

* One limitation is a lack of information, as we have not established a staff or budget for this project. As of now, we only have the time frame that the customer wants it in (5 months).
* There is a potential limitation in the fact that the DMV may not allow outside parties to link to their databases/pull from their test preparation materials.
* We have not established what cloud provider Driver Pass will be going through, as this will impact both cost and the overall responsibility of Driver Pass for their information and infrastructure.

### 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.*

Chart

Description automatically generated