# 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?*

* This project is to build a system for DriverPass, where the client wishes to help new drivers prepare for their drivers test with easy to access information, practice tests, training, and even appointment scheduling.

### 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 wants the system to provide new drivers practice tests, training, and appointment scheduling. With this, they would like to fix the high failure rate on drivers tests at the DMV. Some of the components needed for this system would include DMV requirements integration, user registration, appointment scheduling, and progress tracking.

### 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 DriverPass is completed, it should be able to let users sign up and view their progress, show the user available appointments and time slots for lessons, allow for the user to sign up for training programs, and show the most updated DMV requirements.

## 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?*

* DriverPass should run in multiple environments for widespread accessibility. This would include apps for iPhone and Android, as well as PC. This system should be maintained and updated to support new DMV requirements and support new security 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?*

* Platforms that need to be supported by DriverPass are Windows, Linux, MacOS, and on iPhone and Android. A database would make storing information easier and should be integrated with the cloud.

#### 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?*

* There should be a basic user role, admin role, and teacher role. The user should not have access to other users’ information and should only have access to their information, requesting appointments, and test taking. The role hierarchy would look like admin>teacher>user. The input should be case-sensitive to add a layer of security. The system should flag an issue when a user fails their login after so many attempts.

#### 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?*

* You should easily add/remove/modify to users without changing the code, if you are an admin. This is another security measure in the system. The system should be adaptable to platform upgrades and should have scheduled maintenance every week/two weeks to allow for these updates. The IT admin should have an admin role, and potentially a higher role of IT for access to the system code.

#### 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 needs to have a username and password of at least 8 characters to log in. To secure the data exchange between the client and the server, we would need to encrypt the data. This is done by employing encryption protocols. A brute force attack could not work, as there is a limited number of attempts to log in. If the user forgets their password, they can easily send a recover email or text, or contact their admin.

### 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 for users to reserve drivers’ lessons
* The system shall have different packages for the driving appointments
* The system shall allow for system analysts to add and remove modules
* The system shall have different roles with different access
* The system shall be updated regularly to follow the DMV
* The system shall have regular maintenance and 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.)?*

* The UI should be accessible to everyone, including screen-reader integration, dark mode, different languages, and even different fonts to help with dyslexia. There should be a hierarchy of users, where the highest role is the admin role. Each user would have to use a mouse or touch screen to navigate through the system, with pointers and tips available to read.

### 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 things that were not addressed in the design are the assumption that the user has an updated device and access to basic internet connectivity.

### 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?*

* Some limitations of this system would be the testing done on the different platforms. This could increase the costs, as testers would need to have access to the different platforms. There could be a problem with time, as well. This problem could appear during the testing and maintenance stage of the 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.*

A screenshot of a calendar

Description automatically generated