# CS 255 Business Requirements Document Template

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CS-255-R4786

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03/09/2024

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 create a system called DriverPass which is also the name of the client. To allow the client to be able to provide a better training method for driving students. Since there is a higher amount of individuals failing at the DMV they want to be able to provide support to allow them to succeed at a higher rate.

### 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 be able to allow users to access data from anywhere. While also providing different system access for different roles. The problem they want to fix is decreasing the percentage of failing drivers at the DMV. While also allowing the customers to be able to reserve more easily when booking driving lessons. The different components are the UI/UX design for the system, database that will allow customer accounts to be maintained, and different user modules on the main screen to allow multiple different types of information to be displayed. Cloud based, while also having privacy and security.

### 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 customer to be able to easily access their account through their system, reserve driving lessons, privacy and security, different system access (per role in company).

## 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?*

* Client proposed cloud based, while working off of the web. Which should be accessed through mobile or computer. The system should have little to no latency to allow a smooth experience for the user. The system should be updated when there are changes at the DMV.

#### 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?*

* It should be Windows/Apple, and mobile. I would suggest database systems like MySQL to support the application.

#### 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?*

* I would distinguish users by first/last name. Case-sensitivity for first initial on each. And if there are users with the same name, I would implement their middle name to allow a differentiation between some users. The system should inform the admin about a problem the moment a fault or error code occurs. To allow the admin to get notifications immediately so that they can resolve the issue without creating wasted time. I say wasted time, because it would be considered time wasted lets say if a user is having an issue. Causing them to not benefit from the system and wait until the issue gets resolved.

#### 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?*

* With MySQL it would make it easy to modify a user without really changing the code. But it also depends on what system access an individual may have when trying to modify a user account. It can adapt to platform updates through something like GitHub, where you can add on to the main file through pull requests and test the code prior to launching to ensure that everything works. Before fully modifying the main tree file.

#### 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?*

* Username and password. Along with a two factor authentication that can allow them to login more easily. I would secure the connection through a company paid VPN to allow stronger client and business privacy. If there is a “brute force hack” attempt, by minimizing login attempts and locking accounts to ensure information does not get leaked. While also notifying the user about the attack and how we can proceed forward to ensure we prevent a future attack. And if a user forgets their password they could use the idea of two factor authentication or getting a link from an admin when clicking “forgot password”.

### 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 display online test progress
* The system shall display user information
* The system shall display any driver notes/times and dates for future lessons
* The system shall display any special needs/notes
* The system shall display a photo of the driver and student to mitigate confusion.

### 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 needs for the interface, are to be able to navigate through what is needed to pass the DMV exam. Such as notes, practice test progress/pass fail, user information and any other requests by company or student. Along with a photo to ensure no confusion is made when a lesson is to occur. The different users for this interface would be the student and driver. The driver will need to type up any notes that are necessary from the lesson and test results. And the student would need to type in their information and special needs. The user will interact with the interface through browser.

### 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 I would have would be, “does the user have a mobile phone that can access the website”? (A phone that is possibly older) Does the company have the bandwidth to support large user activity once the system is “live”

### 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?*

* When looking at limitations, I would believe that a limitation would be the amount of storage or memory used for the database. As well as, the server becoming slow due to a high volume mass of users using 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 computer

Description automatically generated