# **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 a system for DriverPass that can provide training services both online and in person. This training will include classes, practice tests, on-road training, and lesson scheduling capabilities. The focus for the project is to address high failure rate among driving tests in the DMV. This project should remedy this by offering people flexible, and accessible training opportunities.

### **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 online system to be capable of managing reservations, user data, training bundles, while complying with DMV regulations. The online system should leverage role-based user management, reservation tracking services, and needs integration with DMV services for updates.

### **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?*

* Customers should be able to register and sign up for different training packages and schedule lessons online.
* Will have an interface that tracks student progress, and any different training material.
* Allow admins to track user reservations, cancellation, etc.
* The system will comply with DMV requirements via regular updates

## **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 website will run in a cloud-based web platform.
* Must be able to handle access from a large network of users with minimal latency.
* Updates must occur with no disturbance to user experience.

#### **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 platform will be made and targeted for web browser and mobile device users.
* The system will require a back-end database system and API support.

#### **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?*

* We will determine the difference in users by using Role-based access control features and other user authorization implementation to make sure each user is identifiable and unique
* The admin should only be contacted if there are personal data conflicts or an error occurs in the system.

#### **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 will give admins in the system the ability to add/remove/modify different training packages, in order to avoid making direct changes with the code. This means the Admin will have full control over user account management. The system will adapt smoothly due its cloud-based architecture, which enables the system to automatically update with new web browsers and operating systems.

#### **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 login will be a basic password login with reset options incase of forgot credentials.
* The connection between client and server will stay secure due to the encryptions that will be integrated. Additionally accounts will lock if multiple failed login attempts are made to protect from brute force attacks.

### **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 customers to schedule, cancel, and modify lessons.
* The system shall track user actions such as creating, modifying, and canceling packages
* The system shall provide practice tests and track progress.
* The system shall alert the admin when DMV updates occur.
* The system shall track driver progress and provide assignments for lessons.
* The system shall allow admins to manage user roles and permissions.

### **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 needs to support role-based functionality for customers, secretaries, and admins.
* Customers should navigate the interface in order to schedule lessons, access training material, and track progress.
* Secretaries should navigate the interface in order to create, modify, and cancel reservations. They should be able to update customer records and add new customer information. They should be able to give customers assignments, and track activity as well.
* Admins will need a dashboard to manage user roles, review logs, and track activity.
* The interface must be accessible via web browser 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?*

* The users will have internet access to use the platform
* The users will meet basic tech requirements
* The users are assumed to have basic tech-proficiency

### **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?*

* Budget and time constraints will limit advanced customization features in
* System updates with the DMV may be delayed or unpredictable as it relies on the DMV to be timely and error free.
* The system will not be able to handle a sudden spike in user registration without further optimization.

### **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.*

