# 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 create a system that is able to perform DriverPass’s expectations for enhanced driver training.
* The client, DriverPass, would like the system to offer online courses, practice tests, on-the-road training, and a scheduling system to set out dates for driving lessons.

### 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?*

* The current problem that DriverPass is facing is the high number of failed driving tests.
* Some components to the system are an online course platform, ability to make reservations, access to practice tests, and a user management system in order to record customer and employee information.

### 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?*

* Online test progress tracking
* Ability to handle different driving package types
* Remote access both online and offline data
* Implement user authentication system for security
* Users are able to reset and manage their passwords
* Develop system for employees and customers to make reservations with online scheduling
* Notifications when the DMV has an updated rule change or policy change
* Enable the system to be able to implement future 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?*

* This system needs to be able to operate in a web-based environment in order to obtain fast response times for users.
* A regular update schedule should be required in order to ensure system improvements and to display active DMV rules/policies.

#### 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 multiple platforms.
  + From Windows, Linux, Mac operating systems to iOS, AndroidOS and other mobile operating systems.
* Back-end support should require a database to access customer information and login information to see details of driving information for each user.
* User information must be accessible on several platforms while displaying the same information across all platforms.

#### 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 password will be case-sensitive in order to log into the system.
* The admin will be able to access all accounts in case someone forgets their password or has to make changes on an employee's account who has access.
* The admin must be able to print an error and activity report in order to examine the problem with 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?*

* The user will be able to alter their profiles without altering the code from the system.
* The system will also be adaptable to updates from the platforms.
* The web version that exists should be updated regularly to ensure compatibility with the newest versions of platform updates.
* The IT admin should be able to access the database and the server in order to provide maintenance.

#### 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 must have a unique password in order to login
* In order to secure the connection between the client and the server, we can use a third-party authenticator to verify the identity of the user. This can be affiliated to their email address, phone number, or another method that may be displayed by the third-party
* If user forgets password, they should be able to automatically reset and create a new password
* To prevent a hacking attempt, we can limit the number of times that a user can incorrectly input a password. This can be followed by a temporary lock on their account or an automatic reset to their 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 validate user login information during the login process.
* The system shall redirect the user to use a second authentication process from a third party authentication group.
* The system shall enable customers to manage their appointments online.
* The system shall create activity reports for reservation tracking
* The system shall notify admins and users for DMV rule/policy changes
* The system shall lock user accounts after a series of incorrect log in attempts.
* The system shall be able to automatically reset passwords for users that have forgotten 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.)?*

* Since this system is web-based, it will be able to be accessed through the browser on both mobile and desktop browsers.
* Each customer user will be able to track tests, see the driver notes, and be able to purchase driving packages.
* Admin users will be able to see the same content that the customer user sees, but with the ability to see it among all customers.
* Admin users will be able to access the entire schedule to look at all appointments made by customers and also able to create appointments for customers.
* The different users that we have are Owner, IT Officer, Secretary, and Customers.

### 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?*

* We can assume that most customers will have access to the internet to connect to the web-based application.
* I assume the devices that customers currently have will be compatible with web browser or have access to web browsers.
* I also assume that customers will have access to an email to receive notifications and for resetting passwords.

### 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?*

* We have a little under 16 weeks to build this system
* We have constraints with web browsers and their updates.
  + System design must be compatible with the major web browsers in order to be available to the majority of customers. There may be updates that change the compatibility of certain web browsers.
* We also cannot pre-determine any changes with rules/policies of the DMV.
  + This is why a notification system is in place to alert us as soon as something new has been implemented.

### 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 graph with several rectangular objects

Description automatically generated with medium confidence*