# 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?*

* To teach people how to drive
* To make roads safer
* To provide people with information about DMV policies and regulations

### 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?*

* Allow people to take online classes and practice tests.
* Allow for reservations to be made by users online or by employees speaking with users on the phone.
* Identify the drivers and the customers.
* To show the following:
  + Online test progress
  + Driver notes
  + Student information
  + Special needs
  + Driver photo
  + Student photo

### 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?*

* To be able to access data online or offline.
* Edit Data online
* Provide an activity tracker that shows who made changes and when they were made.
* Allow employees to make reservations for customers or allow online reservations by customers.
* Handle multiple package types.
* Allow customers to reset their own passwords.
* Manage user roles and permissions.
* Receive notifications about DMV rule changes.
* Web interface for customers to view and make reservations and take online tests.

## 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?*

* Needs to be able to run in a web-based environment.
* Appointment data should be updated when changes are made.
* Load time of 2 seconds or less for most users
* System should be updated monthly or whenever else needed with minimal downtime

#### 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 run on desktop and mobile platforms through a web browser.
* The UI should be able to adapt automatically when in a mobile browser
* The backend will require a database in order to store system logs and user information

#### 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?*

* Users should have a different level of permissions than employees.
* There should be multiple levels of employee permissions.
* Password input should be case sensitive, but username and other input should not.
* Admin should be notified immediately for critical errors, all other error reports will be sent to admin daily.

#### 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?*

* Admin should be able to lock access to accounts and gain access to accounts.
* The IT admin should be able to change employee passwords.
* Users should be able to be removed, added, and modified when needed without code changes.
* The system should be able to automatically adjust to minor platform changes
* IT admin will need access to the database and to the server hosting the web app

#### 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?*

* A username and password should be required for a user to log in.
* Accounts should be temporarily locked after 5 incorrect login attempts.
* Regular users should be able to recover their password through email.
* Employees should recover their account or password by contacting admin to avoid hacking attempts.

### 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 validate user passwords when attempting to log in
* The system shall lock user accounts if login fails five times.
* The system shall send an email for users to reset a password if the password has been forgotten
* The system shall update user information after user or admin commands
* The system shall track user appointments and available appointment times
* The system shall schedule user appointments after user or admin commands
* The system shall notify admin when there are DMV rule changes

### 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 will be web based
* Users will access the interface with desktop or mobile browsers
* Users will be able to access their own account with a purchase and order history , and allow them to purchase packages
* Admin will be able to access the entire schedule and will be able to schedule appointments for users

### 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?*

* Users will have access to the internet and a modern web browser
* Users will have an email address
* DMV rule changes can be tracked automatically using an API

### 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?*

* 15 Weeks for project completion
* Inability to predict changes to web browsers
* Inability to easily get DMV information
* Needs to be compatible with major web browsers

### 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 with medium confidence