# 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?*

* DriverPass is a company with a mission statement to help students prepare for their driver exams.
* They need a system that allows for scheduling both online and offline, and an ease of access to the data for various offline records.

### 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 sees a lack of training services being made available to student drivers working to get their license, resulting in failed driving exams.
* They require an intuitive web-based platform for studying, taking practice exams, and scheduling sessions with their drivers for training.
* DriverPass’s system will offer a handful of packages and require the feature to disable a package without much technical experience on the part of the administrator. Future packages will require long term support from an experienced developer.

### 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 completed, users should be able to sign into an account on the DriverPass website.
* Password handling should be done automatically to ensure that a user is never locked out of their account.
* Administrative roles need the ability to handle password resets manually, download log files of data, revoke permissions to certain account, and easily disable packages.
* The site should be connected to the DMV in some capacity to ensure that the practice exams being provided adhere to compliances.
* Users should have the ability to purchase an available package, schedule a session with a DriverPass driver, take practice exams with feedback from the DriverPass team, and make any necessary changes to scheduled appointments.
* Anyone with a secretary account should be able to edit and update the schedule with information received offline.

## 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 system needs to run on the cloud as a web-based system.
* The system should be capable of running as fast as the user’s internet and device allows.
* The systems will need to be updated frequently as DMV accordance changes and as different packages are made available or discontinued.

#### 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 will need to run on any platform with a web browser.
* A database will be needed to handle user authentication and appointment 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?*

* The system will be capable of differentiating between administrators, typical users, and limited authority employees.
* The input should not be case sensitive for user authentication to limit the amount of password resets that the users may need.
* Administrators should be informed immediately if there is a 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 functionality to make user changes will be handled internally with no necessary code changes.
* The system will require some maintenance to remain relevant on all platforms.
* The IT admin will require the ability to add new packages to the system as requested by the company.

#### 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 will require a username and password to access the system.
* Multi-factored authentication can be used to secure this information exchange.
* Users should be notified via email if there is an attempt to login into their account with multiple failed attempts, and their ability to login should be revoked until they prove their identity.
* If the user forgets their password, a reset link should be emailed to them, and the administrator should have the ability to reset a password manually.

### 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 use multi-factor authentication to secure user logins.
* The system shall automatically update based on the DMV accordance.
* The system shall allow for manual input of data into an otherwise automated system.
* The system shall send notification emails based on scheduled appointments to all necessary parties.
* The system shall reserve the ability to disable packages in the store without the change of code.
* The system shall track user progress in a database and display the information to the user.
* The system shall allow for the ability to revoke administrative access without code change.

### 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 user interface should feature the logo at the top of the page.
* It should have a large online test progress element for the user to interact with and visualize results.
* It should display user information, including name, address, and city, as well as special needs, and their photo.
* There needs to be a section for driver notes updated by the instructors after an appointment.
* The UI should be refined for both web and mobile devices.
* The UI should remain consistent even for users who are in an administrative position.
* It should have sections for all administrative access controls when an admin logs in.

### 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 are assuming that the customers speak and read English.
* We are assuming that the customers are not visually impaired.
* We are assuming that the customers have a general idea of how to use a computer.
* We are assuming that the customers are either on a desktop computer or a touch based mobile device.

### 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?*

* The system is limited to the proposed timeline for completion.
* There is a limitation on the ability to access the system, which would require an internet connection.
* We are limited by the changing needs of the system and predicting them in a way that does not require major back end system redesigns.

### 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.*

Timeline

Description automatically generated