# CS 255 Business Requirements Document Template Christopher Wilson

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 client is DriverPass, and they want to take advantage of a void in the market when it comes to training students for the driving tests at the local Department of Motor Vehicles.
* Liam is the owner of DriverPass and wants to add online classes, practice tests, and on-the-road training for customers to use to prepare for their driver's test.

### 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 system can be accessed from anywhere online and offline from any computer or mobile device.
* Be able to download the report and some information using Excel.
* Be able to control who has administrative control, such as Liam, who will have full access over accounts if someone needs to have their access blocked or to reset their password.
* Be able to track who made a reservation, who cancelled it, and who modified it. Be able to print an activity report in case something goes wrong and figure out who is responsible.
* Be able to make a reservation for a driving lesson. The lessons are two hours long and the customers can call, visit, or make a reservation online, and they should be able to specify the date and time when they want to take the lesson.
* Be able to track which customer is matched with which driver, time, and car.
* Have three packages. Package one will be six hours with a trainer. Package two will be eight hours with a trainer and an in-person lesson where they explain the DMV rules and policies. Package three will be the twelve hours with a trainer, an in-person lesson where they explain the DMV rules and policies, and access to the online class with all content and materials, which includes the practice tests.
* Be able to customize the packages by adding, removing, or modifying features in the future.
* Be able to disable a package if Liam doesn’t want anymore customers registering for it.
* Customer gives their first name, last name, address, phone number, state, and credit card information, expiration date, and security code, pickup location, and drop off location which is the same as the pickup location.
* Customers can easily reset their passwords if they forget.
* Be able to connect with the DMV for updates on new rules, policies, and sample questions for up-to-date information. Get a notification when they update information.
* Information is given through the web and cloud. They don’t want to deal with security and backups.
* They have a picture for the look of the website. It shows what’s in progress and completed sections. It would say test name, time taken, score, and status. Status can be in progress, failed, or passed.
* They should be able to fill a form that has their first name, last name, address, et cetera. A section for contacting DriverPass and contact the student.

### 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?*

* Have three diver packages:
  + Six hours in a car with a trainer
  + Eight hours in a car with a trainer and an in-person lesson where we explain the DMV rules and policies
  + Twelve hours in a car with a trainer, an in-person lesson where we explain the DMV rules and policies, plus access to our online class with all the content and material. The online class also includes practice tests.
* The driving sessions are two hours long and will be spread over many sessions.
* The customers should be able to change, modify, and cancel appointments.
* Web interface that shows the customer's progress. Includes their name, time, score, and status.
* Admin access to Owner Liam, IT officer Ian, and the secretary. The owner should be able to access all the data of the customers. They should be able to change the permissions of other employees as needed.

## 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 should be updated fairly often to ensure that any bugs or breaches are fixed. It should also be updated immediately after any changes to the DMV guidelines to ensure users get the most up to date information.
* The system should use a web-based interface to run.
* The system should run fairly fast because the users have to take exams, which would require a quick connection between the user and the servers.

#### 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 support various browsers such as Internet Explorer, Chrome, Firefox, and Safari to allow it to run on various operating systems.
* It would need a database to store the user information and system information
* It would also need a web server to process and manage the requests and responses from user devices.

#### 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?*

* To distinguish between users, each user must enter their username and password. These should be case sensitive.
* The system should send the administrator a daily report for any errors that occurred and send an immediate notification for severe errors.
* We can also use cookies to store the user login details so they don’t have to constantly log in.

#### 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 administrator should be able to add/remove/modify user information without changing code by creating a web page that allows access to user information.
* The user should be able to update their own information such as their address, name, and password.
* The system should be able to adapt to platform updates by sending the update through the system database, which would be able to update the system for all users.
* The IT admin should have administrative access to be able to change the code in the system and change user information.

#### 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 is required to input a password and a username. The password and username must be case sensitive.
* The system should implement a way for the user to have 2FA via a test or an email.
* To secure the connection between the client and server, the data transferred should be encrypted.
* If there is a brute force attempt, the user should get 10 attempts at their password at after which they must contact the support team or reset their password.
* If the user forgot their password, they should be able to reset their password by sending a code to their email at which allows them to reset 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 credentials when logging in.
* The system shall allow the user to use 2FA when logging in.
* The system shall lock the user out of their account after 10 attempts and make them reset their password.
* The system shall allow the users to access exams that can help them with their test.
* The system shall allow the users to update all their account information.
* The system shall allow the users to access their exam status of the exams.
* The system shall track available appointments and show scheduled appointments.

### 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.)?* Users can see

* Home screen
* Exams
* User information
* Appointments
* Status of their exams
* See any notes given by the instructors
* Package information

Administrators can see

* Schedules
* User information and modifications
* The users and administrators can interact with the browser with a computer, phone, and other devices with browser capabilities.

### 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 system should be accessible 24/7.
* Users have a device that can access the content and have an email.
* The system will be up to date with the current data.
* An app version of the DriverPass will be available.

### 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 requires the users to have a stable internet connection to connect to the servers.
* The system has a set budget and time frame for releasing the system.
* The system has to have up-to-date information from the DMV
* The client only has 10 cars, so they must plan accordingly.

### 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 project

AI-generated content may be incorrect.*