# 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 develop a system for DriverPass that enhances driver training, helping users better prepare for DMV driving tests. The client, DriverPass, wants a solution that provides online classes, practice tests, and optional on-the-road training to ensure customers are more likely to pass their driving tests on the first attempt.

### 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 seeks to address the high failure rate of driving tests by equipping users with the knowledge and skills necessary to succeed. To achieve this, the system will include online educational resources, practice assessments to test users’ readiness, and practical on-the-road training sessions. These components are critical to providing a comprehensive preparation experience.

### 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?*

* The completed system will allow users to create accounts with personal and payment details, including their name, address, phone number, credit card information, and designated pickup/drop-off locations for training. Customers will be able to schedule appointments online, select training packages, and reset their passwords if needed. Administrators will have tools to track driver-customer assignments, monitor reservations, and manage training packages. Additionally, the system will connect with DMV systems to receive updates and notify customers of changes. Users will also have access to records of their completed tests, including test names, time taken, scores, and pass/fail status. Driver notes, including lesson times, start and end hours, and comments, will also be accessible to customers for a personalized training experience.

## 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 must operate in a web-based cloud environment to provide accessibility and reliability. It should maintain an average load time of 1–2 seconds, with feedback provided if load times exceed 3 seconds. To ensure optimal performance, updates will be scheduled monthly or as needed to address system requirements and user feedback.

#### 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 must run on major web browsers, including Internet Explorer, Google Chrome, Firefox, and Safari, across both computers and mobile devices. The back-end infrastructure will require a database to store user and system information and a web server to manage requests and responses efficiently.

#### 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 will be identified through separate login sections for customers and employees, ensuring role-specific access. Passwords will be case-sensitive to enhance security. The system will promptly notify administrators of issues such as failed transactions, downtime, or mismatched data to ensure problems are addressed swiftly and effectively.

#### 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?*

Can changes to the user will be done in the back end and will not change code and the system should adapt to any platform updates without issues.

#### 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 password is required for users to login and the two factor authentication as an extra layer of protection to ensure the connection or data exchange, while users will be locked out after 5 wrong login 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 validate the user's username and password during login.
* The system shall differentiate between customer and admin user types.
* The system shall allow users to reset their password when needed.
* The system shall allow up to five login attempts before locking the user out and notifying the admin.
* The system shall create a user account using the customer's provided information.
* The system shall allow users to access the platform from any internet-enabled device.
* The system shall display available training packages for customers to choose from.
* The system shall allow customers to select and purchase a specific training package.
* The system shall enable admins to disable packages that are fully booked.
* The system shall track and display the matching of customers with specific drivers, lesson dates, and car assignments.
* The system shall integrate with the DMV to retrieve and update user information.
* The system shall display the customer's profile, including test progress, scores, and status.
* The system shall provide access to driver notes, including lesson feedback.
* The system shall show lesson details, including start time, end time, and duration.
* The system shall display both the driver’s and customer’s photos.
* The system shall grant customers access to online learning tools and resources.

### 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 DriverPass system will be accessible through online browsers on computers and mobile devices, with two main user groups such as customers and adminstrators. Customers will have access to login and register pages, view test progress and scores, update their info, access lesson details, training packages, and online learning tools. Admins will manage customer registrations, track package selections, remove fully packages, and manage scheduling for lessons and drivers.

### 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?*

* All users should have access online 24/7 and they should understand how to navigate the website. Admins should have necessary skills to naviate and access all website functions, while customers will be on time and show up for every lesson in their package chosen.

### 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?*

* DriverPass has 10 cars and each car should be maintained to be able to use and issues with the internet connection may come up and cause delays to information needing to be updated, while only so many customers can purchase packages with the limited number of cars. I think that users may not have updated tech on their end, but meeting all requirements of Driver Pass within their budget.

### 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.*

