# 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 aim of this project is to create a complete system for DriverPass, a company that offers driver training, to tackle the issue of insufficient resources available for students to successfully pass their driving tests. The system will offer online practice tests and on-road training to enhance students' readiness for their driving license tests.

### 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 provides a comprehensive platform to assist students in passing their driving tests. The platform offers online classes, practice tests, and on-the-road training to increase the success rate of students. Users can access their data from anywhere, online or offline, and manage reservations, track activities, and comply with the latest rules and policies set by the Department of Motor Vehicles (DMV). The platform also supports various user roles with different access rights and offers a user-friendly interface.

### 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 offer a comprehensive driving license test preparation program that includes online classes and practice tests. We also provide on-the-road training sessions with experienced drivers to help users gain practical driving skills and confidence. Our platform enables users to make, modify, and cancel their driving lesson reservations with ease. We keep track of user activities and provide detailed reports for monitoring and accountability purposes. We stay up-to-date with DMV rules, policies, and sample questions to ensure the best training experience for our users. We prioritize data security and provide different user roles with appropriate access rights. Our user interface is intuitive and visually appealing for easy navigation and interaction.

## 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 be capable of quick response times for user interactions. Additionally, it should be able to handle multiple users simultaneously without any noticeable decrease in performance. Lastly, generating reports should be done within a reasonable time frame.

#### 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 be accessible via web browsers and mobile devices. Additionally, it should be compatible with commonly used operating systems like Windows, macOS, iOS, and Android.

#### 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?*

When a user first accesses the website, they should be able to create a unique username and password. The system should recognize the difference between uppercase and lowercase letters in the input. In addition, the website should have multi-factor authentication to enhance security and prevent unauthorized access. The recording and display of user data, including reservations, progress, and test results, should be accurate in the system. Numeric calculations, like test scores, should be consistent and precise. If any issues, glitches, or bugs occur on the website, the system should alert the administrator promptly to resolve them quickly.

#### 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 system needs to be adaptable to any future modifications in DMV rules, policies, and sample inquiries with ease. Moreover, it must permit the addition or removal of driving lesson packages with minimum technical interference.

#### 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?*

To access the system, the user must provide a username, password, and additional authentication. The cloud will facilitate data exchange between the client and server. As a security measure against brute force attacks, the system will disable an account after four incorrect login attempts. In case of a forgotten password, the user can provide their email address to receive a password reset link. All user data, including personal and financial information, must be stored and transmitted securely. User roles will have varying levels of access rights, with the ability to manage accounts and prevent unauthorized access.

### 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.”*

Upon login, the system shall immediately authenticate the user's credentials. Furthermore, the system shall seamlessly handle reservations and bookings on behalf of users. The system offers an extensive range of practice tests and courses. Drivers shall have access to all relevant information pertaining to their assigned customers. There are three distinct driving packages available for selection. The system operates with unparalleled speed and efficiency. Customized access shall be granted to users based on their designated privileges. The system meticulously maintains a comprehensive record of all completed tests and work.

### 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 interface should allow customers to easily book driving appointments, enroll in online classes and tests, and make modifications as needed. Driver Pass employees should also have access to the interface for updates and changes. The interface should be accessible from any device with an internet connection, including mobile phones, laptops, and computers. It should be user-friendly and easy to navigate. Additionally, users should be able to track their progress, view completed and ongoing tests, and see relevant details such as test name, time taken, score, and status. Users should also be able to schedule, modify, and cancel driving lesson reservations online. Finally, the system should provide a way for users to contact DriverPass and receive timely responses.

### 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?*

Our users possess basic computer skills and have internet access. During registration and reservation processes, our users provide precise and authentic information. The system will be constructed using cloud-based technologies to guarantee scalability, dependability, and data backup. Even though we were not given a budget for the system, we are assuming that all the resources we are utilizing to build the system will fit within the budget. This includes using the Linux environment and cloud-based technology. Additionally, we are assuming that we have seamless access to all of these technologies.

### 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 must build this system within five months, but we were not given a budget. Our current limitation is the number of people working on the website. To ensure we meet the deadline, we need more employees. Therefore, an agile approach is necessary. The system will not have modules for non-developers to add or remove functionality easily. Any future features will be considered for separate releases and will not be included in the initial system design.

### 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

Description automatically generated