# 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?*

* This project has the objective to provide a comprehensive system to DriverPass, a company that has a goal of improving driver training and exam preparedness. DriverPass wants to have a system that lets customers schedule in-person driving lessons, be able to take practice exams, and participate in virtual sessions. The system should also be able to handle bookings, track user activity, protect user information, and be accessible online from any device.

### 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?*

* By offering better and improved training options, DriverPass aims to reduce the high failure rates of driving tests. System should be able to handle driving class reservations, practice exams, and online class registrations. It needs to include the following key components: user management, reservation tracking, data access and security features. It should also provide different user roles with different levels of access and the ability to generate activity reports.

### 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 site should allow users to enroll in classes, schedule driving lessons, and complete practice exams. The system also needs to monitor user actions, be able to process reservations, and keep data processing safe and secure. Significant responsibilities involve verifying user identities, implementing access control based on roles, managing reservations, and incorporating updates from the DMV. Lastly, the system should provide a user-friendly interface for both clients and staff.

## 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 web-based and is functional on various devices and browsers. The system should have a quick response time and must be updated regularly. Another system requirement is that it needs to support several users at once without experiencing any performance issues.

#### 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 the web, must function smoothly on different devices and browsers. Regular updates are important to maintain security and smooth functioning while guaranteeing quick response times. Additionally, it must be able to handle multiple users at once without any decrease in the performance.

#### 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?*

* Using unique login credentials will be needed to manage different users. Input must be case-sensitive to maintain integrity of the data. Unsuccessful login attempts or inconsistent data should be reported to the admin right away.

#### 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?*

* User management needs to be adaptable, enabling addition, removal, and modification of users without having to change the code. It must adapt to platform updates, ensuring uninterrupted operation. IT administrators should have full access to manage user accounts, be able to reset passwords, and monitor system performance.

#### 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?*

* Login credentials are needed to access the system. Encryption should be used for data transmission between the client and server to avoid unauthorized access. The system should lock the account if multiple failed attempts are detected and if there is a uncontrol force attack and inform the administrator immediately. Users should have the ability to securely reset their passwords if they forget them.

### 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 users to be able to register for classes and schedule driving lessons through the system.
* The system shall be tracked by the system, and activity reports will be generated.
* The system shall manage reservations and users will be notified of any changes.
* The system shall integrate with DMV updates to ensure compliance.

### 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 system’s interface should be simple and compatible with both mobile and web browsers. The customers, IT staff, and the secretary are the different users of this interface. Users must be able to register, schedule appointments, and finish the tests while employees must be able to handle bookings and manage user accounts.

### 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?*

* It is expected that users have an internet connection and are familiar with online systems. The technology that will be used is sufficient to handle the required functionalities without the need for significant adjustments. The system is designed with scalability in mind to handle future features.

### 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?*

* Limitations considered for the system are the time, availability of funds and technology. Limited resources may affect the development timeline and the scope of the features. In addition, the quality of internet connection and devices used by users might affect the system’s performance.

### Gantt Chart

*A screenshot of a computer

Description automatically generatedPlease 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.*