# 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 DriverPass system with the capability to offer driver training to clients, aiding them in successfully passing their DMV driving assessments. The system is intended to include virtual courses, mock tests, and on-the-road training, as well as the ability for clients to schedule their own driving lessons. Additionally, the system should grant staff access to essential work-related data and enable administrators to oversee user accounts and data protection.

### 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 realized that people need better training to help them pass their driving tests at the DMV. So, they're planning to make a system that offers online classes, practice tests, and in-person training to meet this need. This system will be used by customers, employees, and administrators to organize the training process.
* Different employees will have different levels of access to the system, and the company wants to keep track of what users do, like who books lessons, who cancels them, and who reschedules them. The people using this system will be customers who want to learn how to drive, employees who need to use the system for their work, and administrators who will take care of the system.
* Customers will be able to book driving lessons either online or in person and see which instructor they'll be working with. Employees will use the system to get information and do their jobs, while administrators will manage user accounts, make sure everything is secure, and keep backups of important data.

### 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?*

* Enable customers to reach online courses, practice exams, and practical road instruction.
* Encourage customers to schedule driving lessons, whether virtually or in-person, and follow their assigned instructor for the session.
* Grant employees access to information and the ability to carry out their work duties using the system.
* Provide administrators with the capability to oversee user accounts, establish security measures, and create backups of data.
* Provide a secure system with varying levels of entry for different staff members.
* Monitor user actions, including reservation creation, cancellation, and the most recent modifications.
* Facilitate the client in accessing system data both online and offline and permit the download of reports for analysis.

## 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 operate through a web interface, accessible via a website hosted on the internet or the cloud. It should also be responsive and user-friendly, ensuring that users can access the website easily and without any issues. Additionally, the system should be flexible, allowing the client to incorporate new features whenever they choose.

#### 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 platform should run on Windows as it is the most common operating system. The system utilizes cloud technology to handle security measures and manages the necessary backend databases.

#### 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 users initially visit the website, they should have the ability to set up a unique username and password. The system should consider letter cases when processing this information. Furthermore, to enhance security and reduce the risk of unauthorized access, the system should implement multi-factor authentication, such as inputting a PIN or face recognition. Additionally, the system should promptly alert the administrator about any issues, malfunctions, or errors on the website to ensure quick resolution and minimize downtime.

#### 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 provides the ability to adjust user settings and remove users without requiring changes to the initial code. As the need arises for additional features, the system will be gradually included in platform updates. These updates will be initiated when DriverPass decides to enhance the website. The IT administrator will have complete access to the system, enabling them to implement necessary changes or revoke access for former employees who no longer require it.

#### 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?*

### Users will need both a username and password to log in, along with an additional level of authentication for extra security. Data transfer between the client and server will be managed by the cloud. To prevent brute force attacks, the system will automatically lock an account after three consecutive failed login attempts. In the event a user forgets their password, they can initiate a password reset by entering the email associated with their account. A password reset link will then be sent to that email address.

### 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 run with no error.
* The system shall run fast and efficiently.
* The system shall schedule and track driving appointments.
* The system will offer modified access determined by the user's privileges.
* The system will display the tests and tasks the user has previously finished.

### 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 offer customers the ability to book driving appointment packages, enroll in online classes, and take tests. Additionally, it should permit DriverPass staff to access and modify the system as required. Users should be able to interact with the interface from various devices, including mobile phones, laptops, computers, or any device with internet connectivity.

### 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?*

* Some assumptions made in the design above are that every user would have access to their account or have access to an alternate email if the account password is incorrect.

### 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?*

* Some limitations would be the time constraint. We are only given 15 weeks to complete this project. Another limitation would be the ability to have the system compatible with all operating systems and browsers.

### 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 calendar

Description automatically generated*