# 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 client for this project is DriverPass, a new company focused on addressing the gaps in the driver training market. Their goal is to provide a comprehensive driver training platform that tackles the challenges faced by learners.
* This project aims to enhance the driver training platform to help reduce the high failure rates at the DMV. The updated system will facilitate online classes, practice tests, and the scheduling of on-the-road lessons.
* Users will have access to data from anywhere, including the ability to download reports for offline use. The system will track user activity while ensuring security through role-based access. Additionally, it will integrate with DMV regulations and policies to remain up to date.

### 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?*

* DrivePass is a company which is targeting the gap in the driver training market.
* The company offers various training packages, including both online content and on-road lessons which allow drivers to train in ways that are best suited for them.
* The system must support reservations, user management, and compliance with the DMV requirements.
* This project involves gathering requirements, designing diagrams, developing interfaces, linking databases, and conducting system testing.

### 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 goal is to build a flexible, web-based system that manages driver training reservations, lessons, and user data.
* It should ensure secure, role-based access with activity tracking.
* The system will enable online scheduling, account management, and report generation.
* It must remain aligned with the DMV’s updates through notifications.
* This project aims to be completed within a scheduled timeline, with clear phases from requirements gathering to delivery.
* Future feature expansion, such as package customization and module management, should be possible.

## Requirements

### Nonfunctional Requirements

#### Performance Requirements

* The system will be a cloud-based web solution designed to enhance user security for personal information, ensuring a safe and reliable user experience.
* It will operate efficiently, offering users quick access to all features while maintaining high performance levels for a seamless interaction.
* The system will be regularly updated to align with current DMV rules and regulations, ensuring accuracy while implementing robust IT security measures to safeguard user data through continuous maintenance and code enhancements.

#### Platform Constraints

* The platform should be designed to operate exclusively on a single environment to ensure optimal compatibility and availability, rather than being accessible across multiple operating systems such as Windows, Linux, Mac, and mobile devices
* When accessed on mobile devices, the website must be responsive, automatically adjusting to accommodate the varying screen sizes and resolutions of different devices.
* The system's backend will function as a centralized database for storing user information, which is why utilizing a cloud-based infrastructure is strongly recommended for enhanced

#### 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?*

* Each user is required to have a unique email address or username along with a password to facilitate proper identification. Both of these credentials must be case-sensitive to enhance security measures.
* In the event that users exceed the designated number of login attempts with incorrect information, the administration and IT team will receive immediate notifications regarding a potential security threat.

#### Adaptability

* The IT administration will maintain comprehensive access to modify and oversee all programs and code within the system at all times. This capability is essential for effectively ensuring that the system remains bug-free and operates efficiently. Additionally, it enables IT administrators to promptly identify and resolve any issues that may arise within the system.
* IT administrators will have the authority to remove, add, or modify user accounts at any time. This measure is implemented to prevent unauthorized access and to safeguard against any potential hacking or fraudulent activities among users within the system.
* The system is designed to automatically adapt to any updates implemented on the platform, ensuring that it consistently operates with the most current version and functionality available.

#### Security

* Users must create a unique username and password to access the system. Additionally, a multi-factor authentication process will be implemented to enhance the security of the login procedure.

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* In the event a user forgets their password, they can click a designated link to receive a temporary password via the email associated with their account. This will enable them to reset their password promptly.
* To safeguard against hacking attempts, particularly through "brute force" methods, any affected user account will be immediately locked. The user will then be notified and required to contact IT administration or customer service to regain access. At this stage, the user must verify account information, which may include but is not limited to their email address, zip code, or phone number.
* To ensure a secure connection and data exchange between the client and the server, data management will be conducted via a cloud-based system, thereby enhancing the overall security of all stored information.

**Functional Requirements**

* The system will complete the following:
* User credentials will be verified upon login to ensure secure access.
* Users will have the ability to register for online classes, participate in practice tests, and engage in in-person training sessions.
* Users will have access to view instructors' profiles, including their qualifications and credentials.
* The system will provide users with a comprehensive chart to track their progress across classes, tests, and all training activities, along with observations and feedback from instructors.
* Instructors will have the capability to monitor students' progress and provide constructive feedback regarding their performance.

### User Interface

* Interface needs to include:
* A device capable of connecting to the internet and utilizing web browsers, such as a computer, tablet, or mobile device.
* The user interface will need to include:
* IT
* Administration
* Customer/User
* The IT and Administration teams will have comprehensive access to the entire system. This access will facilitate the efficient operation of the system and enable timely upgrades or enhancements as necessary.
* Customers/users will be granted restricted access to specific functions necessary for their tasks. This approach ensures that they are unable to make unauthorized changes to the system while having access only to the features relevant to their needs.
* Users can interact with the interface via a web browser, as this is currently a web-based application.

### Assumptions

* The design framework incorporates the following key assumptions regarding user behavior and capabilities:
* Users are expected to have access to internet-enabled devices, such as mobile phones or computers.
* User will be able to complete the login process using a secure username and password.
* Users will engage in practice tests and participate in online classes.
* Users are anticipated to schedule in-person training sessions for hands-on practice.
* It is important to note that budgetary considerations have not been addressed within the current design, as specific financial parameters have not been outlined by the owner.

### 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?*

* Time Constraints:
* The Gantt chart and timeline developed during the Schedule Planning phase provide an overview of expected task completion timelines; however, these do not guarantee that each task will be fully completed within the allotted time.
* Various limitations such as the availability of developers, technological resources, and budget constraints may significantly impact task completion durations.
* Resource Limitations:
* Successful system development and project completion require adequate resources, including budget, skilled personnel (developers, testers, project leads, etc.), and appropriate technology. Each of these resources has inherent limitations.
* While the project team may be small, it is imperative that all team members possess extensive experience and are capable of effective collaboration. Close cooperation between developers and testers is essential to ensure that the software functions correctly, and coordination with project leads is necessary to maintain adherence to timelines.
* Budgetary constraints may restrict the number of staff that can be employed and may not cover the necessary technologies, including various software and hardware requirements.
* The technology required for software development is often costly, as it encompasses a range of operating systems, platforms, software programs, and Integrated Development Environments (IDEs).

### Gantt Chart

A screenshot of a computer

AI-generated content may be incorrect.