# 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?*

* To help perspective drivers, DriverPass wants to create a system that provides students with the following:
* Practice exams
* Schedule training sessions
* Monitor and receive progress

### 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 would like to implement a system that helps upcoming drivers be more successful.
* The programs that will be implemented are the of the following: online exams, courses, and active feedback to better prepare the students for the actual test.
* The system must maintain proper security measures to ensure the data of its users is protected. Such data includes username and passwords, private information, and credit information.
* The system should have strong enough software to allow users to reserve, cancel, modify, and choose between multiple packages of drivers’ education.

### 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?*

* Once completed, the system should transform into a fully operational website that allows its users to schedule, cancel, and modify their driving lessons.
* The system should implement restricted access for specific employees that ensures only necessary employees can authorize certain actions.
* It is essential that object models, process models, and UML diagrams allow the team to visualize and understand what is needed to ensure functionality.
* Lastly, it is imperative to select an operating platform and determine the programming languages that will be utilized to construct the website.

## 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?*

* Because it is an online platform, the system should be web-based.
* The system should be self sufficient to ensure that users can access the website seamlessly.
* The system should be able to maintain regular updates and maintenance.

#### 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 be compatible with Linux.
* Cloud technology should be implemented so that it can handle security measures and manage the necessary 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?*

* Each user should have the ability to create a unique username and password. The input for passwords should be case sensitive.
* The system should have multi-factor authentication to enhance security.
* The system should have regular scheduled maintenance to identify glitches, issues, or potential bugs within the system.

#### 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 will offer flexibility to edit and remove users without modifying the code.
* The system will integrate into a platform update as the demand for additional features comes up.
* Whenever DriverPass decides to incorporate new features, the system will immediately update.
* The IT administrator will have complete system access that allows them to edit changes when necessary.

#### 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 log in, users will need to provide a username and password, in addition to completing multifactor authentication.
* Data exchange between the client and server will be managed by the cloud infrastructure.
* As a security measure against brute force attacks, the system should deactivate an account following four consecutive incorrect login attempts.
* In the event a user forgets their password, they will be prompted to input the email address associated with their account. Subsequently, a password reset link will be sent to the provided 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 the user credentials when logging in.
* The system shall allow users to book courses.
* The system shall provide the following: practice tests and classes.
* The system shall allow the user to see which driver they are paired with.
* The system shall provide customer feedback to ensure success.
* The system shall show past tests and performances.
* The system shall be fast and efficient with constant feedback.

### 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 reserve driving appointment packages, access online classes, and take tests.
* DriverPass employees should have the capability to access the interface to implement changes and updates as required.
* Users should be able to interact with the interface on various devices, including mobile phones, laptops, computers, or any internet-connected device.

### 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?*

* The absence of a specified budget for the system has led us to presume that all the resources required for system development, such as the Linux environment and cloud services, will be within the budget.
* Additionally, we are working under the assumption that we have convenient access to the necessary technology.

### 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?*

* Without a given budget, we know that we have roughly five months to complete the project.
* The team seems a bit understaffed and that can cause complications when finishing the project on time. Because of this, an agile method would be most efficient.

### 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.*