# 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 aims to develop a DriverPass system to help drivers pass a driving test. After an interview, we will build a business requirements document to capture DriverPass’s needs accurately.
* The client is DriverPass, and they are in the business of assisting people in passing the driving tests. They would like the system to have a website where people can go and study, take practice exams, change passwords, set up appointments, and more.

### 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 a system that helps people learn how to drive.
* When people fail driving tests, they only have their failed test for studying; DriverPass wants to change that.
* Practice exams, classes, appointment scheduling, changing passwords, access to reports, and role management on the website are all components of the system that DriverPass hopes to have installed.
* DriverPass wants the system to offer three packages for their customers and the ability to disable them.

### 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?*

* When completed, the system should have a website with classes and practice tests.
* There should be a section to make appointments.
* The needs to be a way to assign roles for different employees, clients, and owners.
* Process models need to be developed for proper communication of the data structure and flow.
* Object models will be needed to display needed components.

## 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?*

* There needs to be a web-based system in the cloud for a fast connection, and the cloud can store information such as books and tests for easy access.
* The system should be developed to be fast as it will need to handle multiple users at one time. As the business grows, the website should add additional resources to compensate.
* Updates to the system should be made when needed. If there is an OS update involving security features, it should be done immediately.
* If there are updates to state laws for driving, there needs to be an update before the new regulations go into effect.
* When the client wants new features, there should be an update to implement them.

#### 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 Ubuntu Server, allowing for a robust, lightweight design with enough features to perform the job.
* A database will be needed for appointments, classes, and user information.

#### 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?*

* A username will be used to distinguish different users, but a client number will also be assigned for better computer processing.
* The username will not need to be case-sensitive, but the password will be for better security.
* A notification should be sent to the IT department if a process returns an error.

#### 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?*

* Anyone from the management level and up can add/remove/modify the user base.
* The system will adapt to platform updates slowly over time.
* Too many updates at once could make it difficult to revert to a previous state if something goes wrong.
* IT administrators will need full access to the system, and access must be revoked immediately if one leaves the business.

#### 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?*

* The user will be required to have a username and password with the option for two-factor authentication.
* The client will connect to a server with SSL encryption to keep the connection private.
* To avoid a brute force attack, there will be a limit to how many access attempts an IP address can have per 30 minutes.
* If a user forgets their password, a link will be sent via email to reset it.

### 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 fast, with multiple users accessing the system simultaneously.
* The system shall have at least three different driver packages.
* The system shall accept, remove, and modify reservations.
* The system shall have different access roles, from user to owner.
* The system shall have tests and study material.
* The system shall have reports for management level and higher.
* The system shall have the driver and customer paired together when making reservations.

### 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 must be simple to use and allow access to the system’s core features.
* The interface needs to have a different setup for different roles. Employees need access to change features as required and review reports. In comparison, the customers need to user it for studies and appointments.
* The user shall be able to interact with the interface by a browser on any device that supports SSL.

### 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?*

* There is no budget discussion, which is directly related to how faster the system can perform.
* I assume that everyone has access to the internet, a device with a secure browser, and power for the device.

### 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?*

* There was no time information about a budget to stay within.
* There is a maximum amount of customers that can be logged in at the same time.
* The system can only help the customer so much that the customer needs real commitment to pass.

### 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 computer

Description automatically generated with low confidence