# 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 is a company called DriverPass. Liam is the CEO of DriverPass and he wants to take advantage with the void in the market and create a business where people can go and prepare for the drivers tests in multiple ways like training, practice test, and on road training.

### 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?*

* accessible online from anywhere
* provide online classes and practice driving tests to students as well as in person driving classes.
* Has a reservation method that allows the customer and company personnel to book the three packages or the in-person driving classes that are offered. This method should also allow modifications of the schedule as well.
* User authentication and authorization that give certain abilities in the system based on the user’s role. (Owner has unlimited access, secretaries’ access is limited
* The owner needs the ability to manage all accounts (reset passwords, block accounts, restrict access, etc.)
* The owner also needs the ability to close the packages and stop reservations if too many are made.
* connect to the DMV so new rules, policies, and sample questions are updated. Provide a notification whenever an update occurs
* company personnel and users need to see the test progress, personal information, driver notes, driver photo, student photo, and any special needs. Test progress should show the name of the test, time it was taken, score, and status (in progress, passed, failed, not taken)
* The owner should be able to track which driver is paired to each student and which car is being used. (Ties in with reservation system)
* The system must operate on the cloud. The owner does not want to deal with backup and security

### 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?*

* Our goal is to develop a fully functional website that provides students with access to online driving classes and practice exams. In addition, our website will offer students the option to book in-person on-the-road driving training, available in three different packages. Students will be able to schedule the in-person training in two-hour blocks and make changes to their class timings and dates according to their convenience.
* The system empowers our employees to efficiently schedule appointments for students who visit our premises or contact us through the reservation system. In addition, the system provides the owner with the ability to remove any of the three available packages, monitor the pairing of students with their respective drivers, modify user access levels, access driver notes and student information, and track any changes made to the system.
* Top of Form

## 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 client has expressed the requirement for their system to be web-based, leveraging cloud technology to minimize the extent of technical work on their part. They expect the system to offer efficient performance, ensuring easy accessibility for all users. Additionally, there is a need for the system to have automatic updates and the capability to send notifications when an update is available.

#### 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 is designed to operate across multiple devices and operations, ensuring universal access to its services. Implementing DriverPass via the cloud eliminates the need for additional tools or databases, as the cloud comes equipped with these features and manages all security and databases for the back end.

#### 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?*

During the initial registration process, users should have the capability to establish their unique username and password. The input will retain case-sensitivity, and a multifactor authenticator will be implemented to bolster security measures. The system is designed to promptly alert the administrator of any occurring issues, such as glitches or bugs, to ensure timely resolution.

#### 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 IT administrator requires full cloud access to uphold system functionality, safeguard against breaches, and oversee seamless operations. Furthermore, the administrator should be capable of modifying or removing any user or employee without necessitating alterations to the underlying code, as this functionality should be within the IT administrator's purview.

#### 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?*

In order to initiate the login process, individuals are required to directly contact the designated secretary to furnish their personal information including name, contact number, geographical location, and pertinent payment details. Subsequently, the creation of an account will entail the generation of a unique username and password. This modus operandi will facilitate comprehensive user activity monitoring by the system administrator, in conjunction with data exchange functionality managed by the cloud for seamless communication between the client and server. In the event of a forgotten password, a defined procedure for creating a new password will be adhered to. Any potential security breach will be promptly identified by the IT officer, courtesy of their system access privileges, and the administrator who receives real-time notifications detailing every system interaction.

### 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 prompt you to inter your valid username and password

* The system shall book reservations
* The system shall provide practice tests and classes
* The system shall show the driver you will train with
* The system shall offer three different packages
* The system shall run fast and efficiently
* The system shall provide access to user and their privileges
* The system shall show work already completed

### 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.)?*

Users should have the capability to access the web-based system from any device, including computers, mobile phones, and tablets. They should possess the ability to schedule or modify appointments, as well as input or update their personal information. Furthermore, users should be able to retrieve practice tests and denote any special needs, along with uploading a profile picture. The user interface should integrate buttons and dropdown menus to facilitate these features.

### 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?*

An aspect that was not explicitly discussed pertains to the financial allocation for the completion of the system. Consequently, we are presuming that the budget encompasses the procurement of the requisite equipment for the system.

### 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?*

We are confronted with several constraints. The project must be completed within a five-month period and is not allocated a specific budget. Additionally, a shortage of personnel necessitates further recruitment for the site's construction. Given these constraints, it is advisable to adopt an agile approach to optimize our efforts.

### 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 project

Description automatically generated