# 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 DriverPass (Client) is to provide extra help to driving students because “So many people fail their driving test”.
* Their system aims to bring online, and on-the road, driving training directly to the customer.

### 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?*

* This system collects, customizes, and saves user-provided data.
* Customers wish to utilize the system to make driving reservations, at their desired time, using their previously saved data.
* Appointments would need to be separated into three packages, so each package will have different traits, based on the information in our transcript.

### 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 be able to have the features provided in the system background section with fully-functioning and bug-free functions.
* In a design standpoint, a sketch was made to draw an idea of the kind of interface should have, this will be used as a direct inspiration for organizing and presenting data to the user.
* Password reset and heavy data security is required.

## 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?*

* Service systems are mostly utilized by users on web-based and application environments. For this reason, this should be the top two priority development environments.
* The system should run with the lowest user input lag possible.
* Since this is a service system, it is recommended that it should be updated as frequently as possible. A possible timeframe for updates could be from 1 to 4 updates a month, depending on customer feedback.

#### 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?*

* This particular system benefits from Windows and Mac environments. Mac and Windows have the highest user demand, and it is easy to develop for web-based and application environments.
* The system requires multiple databases that hold different data, and multiple servers that connect, and hold, multiple users.

#### 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?*

* It is recommended that the system should be case-sensitive and that should be aware of any duplicate users, to avoid multiple users with the same sensitive data.
* The system should persuade users to only use data that is unique to them, especially in passwords and usernames.
* The system should inform the admin of any problem as quickly as possible, for fast fixture.

#### 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 could adapt to any user edits without interfering with the code by backing up user data, warning pop-ups, and restrictive access.
* By holding the majority of users in a single group of databases, admins have more control over user’s data and the system can adapt to changes better.
* An IT admin can have access to most of the user’s data, with the exception of username, password, or payment information.

#### 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 system should require the user’s: username, password, shipping information, payment information, first name and last name.
* User-provided data should be stored in at least one database that is stored on a server. Data connection, or communication, should be from user to server.
* In case of hackings, the system should be protected with multiple complex firewalls, vpn’s for admins, and cyber security experts willing to defend against any attack. It is recommended that the system should pause execution in the event of a hacker attack, to avoid any significant or permanent damage.
* Users that forget their passwords should follow the established password recovery method; input an alternative e-mail, the system should send a password-recovering e-mail, user should input a new password, and the system should grant the user access to its account.

### 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 should validate unique data.
* The system should contain course descriptions and tier benefits.
* The system should inform the user of tutor scheduling openings.
* The system should be able to rate a tutor, based on experience.

### 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 be user-friendly, easy to use, with stand-out pictures, and with only the necessary descriptions that difference the three different packages.
* This interface method encompasses countless users, ranging from eligible teenagers to senior citizens eager to learn how to drive.
* The mobile version of the system should behave the same way as the web version, but it needs additional code to support touch screen selection.
* The system should adjust to the selected package.

### 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 specific user interface, general framework, or additional customizations are not specified in the design.
* The general assumption is that most of the users own the latest Microsoft Windows version, latest Apple MacOS version, or an updated smartphone with its latest OS version.

### 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?*

* Although the development seems straightforward, the servers and security measures can cause a budget dent in development.
* The development codes for security measures, touch screen selection, and database organization are not accounted for in the scheduling plan.

### 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*