# 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, DriverPass, wants to help increase the passing rate of the driving tests conducted by the DMV by providing an online testing and practicing resource as well as in person in car 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?*

* DriverPass wants the system’s data to be easily exported for future reference offline. The head of IT (Ian) wants full administrative access to the system.
* The client requests a basic information gathering system with a standard set of client info to include location of the in-person appointments.
* They request a connection with the DMV in order to keep up to date with new policies.
* The client **is not** interested in handling backup/security, and wants everything to be cloud based (no home server at client location).

### 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?*

* DriverPass requires an easy to use client based reservation program that the customer and secretary can use to schedule the in person appointments.
* The client has a set of packages they offer customers and wishes for them to be modifiable, but this will have to reprogrammed by us in the future once we get the ball rolling.

## 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?*

* DriverPass program will be web-based.
* The system should run as efficiently as whatever internet connection is used to access it. This can be achieved by not using many pictures and having it be html based.
* The system should be updated whenever the owner wants to add more functionality to his company.

#### 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?*

* It should be able to run on all systems given its web-based existence, however mainstream browsers should only be used (safari, chrome, firefox, edge.)
* It will need a customer database.
* It will need an available car/instructor database.
* It will need an interactive calendar for the owner to use for scheduling.

#### 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 will have a login system with IDs and passwords. The ID will not be case-sensitive, but the password will.
* If this fails, the user can go through an ID/password retrieval program by using their email address.
* The admin should be informed when the user can not remember any of their information, and there should be an option to submit a ticket to IT for email correspondence.

#### 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?*

* Yes, the information stored can be modified without changing codes. The code will be written in such a way that the user database can be changed via external prompts and dialogue windows for the owner/user to change info as they wish.
* When an update is completed the IT department will install it. The system shouldn’t change in any way unless intended.
* The IT department should have access to the databases but will not be allowed to alter the code.

#### 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?*

* For the user to login, an ID/password is needed.
* The company can use a “CAPTCHA” authentication if they feel necessary.
* If there is a brute force hacking attempt, the IT department should automatically lock out all of the accounts.
* If the user forgets their password, they can use their email address to be sent a temporary password. They can use this temporary password to login, then automatically be prompted to enter a new permanent password.
* If the user attempts to log in too many times with an incorrect password, their account should be automatically locked out. Upon this moment, the IT department will be notified and they can then investigate the situation.

### 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 have an easy-to-use scheduling interface.
* The system shall validate user credentials when logging in.
* The system shall protect customer information.
* The system shall allow IT to aid whenever necessary.

### 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 needs to be easy to interpret and use.
* The customers and the owner will use this interface, however most of it is for customer functionality.
* The customer will be able to login and schedule their desired course.
* The customer will be able to use mobile and desktop browsers.

### 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 website will look good and run smoothly.
* It will have graphics and smooth transitions considering our customer base is more than likely to be teenagers.
* The scheduling process will be very easy to use, and if that spot is taken it will be easy to see.
* The customer will be able to easily contact the company to make changes or cancel their appointment.

### 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?*

* Some aspects may not run as smoothly on a mobile platform i.e., the scheduling calendar.
* The website should look good but stay away from heavy images or embedded videos or ads to avoid loading times for slower internet connections.

### 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.*

Chart, waterfall chart

Description automatically generated