# 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

* The purpose of this project is to create an online site for the client, DriverPass, that allows students to access driving material and practice tests.

### System Background

* The client wants the online site to have individual logins for all their students and staff.
* The logins for students would be created student side or client side. It would further have the ability to purchase learning packages and set up appointments for in person driving practice.
* The staff would be able to write notes on the students that they, as students, would be able to access and learn from.

### Objectives and Goals

* The system when complete will be able to do all the above for students and some other features for the client.
* The client Owner wants an exportable feature for data in the form of a spreadsheet.
* They also want to be able to update information, possibly automatically, as the government DMV driving information changes.

## 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?*

* This is a web based system.
* The hardware that hosts this needs to be connected to high speed internet for both upload and download speeds.
* The system should be updated as soon as changes are made for each individual login.
* As a total system update, keeping the hardware firmware to date and the OS and any other relevant software (firewalls and such) updated will be sufficient.

#### 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?*

* Since the request is for a web based system, this will be able to run on most web applications.
* Special care to ensure the running on the four major we browser (MS Edge, Firefox, Google Chrome, and Safari)
* The client will also need access to a Excel unless they want to import the data to Google Sheets.

#### 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 of the users will have a unique login.
* There will be at least four levels of login types (student, staff, IT manager, and owner)
* The password will be case sensitive but unless requested, the user name doesn’t need to be.
* Only moderate issues will be sent to the Admin, password resets can be done locally without notification to Admin.

#### 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?*

* Changed user information will be possible without changing the code.
* This is a web based application and they run very similarly
* The IT admin will need to be able to edit other accounts, access the same data as the Owner, and be able to delete or suspend accounts.

#### 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 users will need a user name and password to login.
* Secure connections will be done through the router and on system firewalls.
* Restrictions or 10 failed login attempts per some time period should be implemented and a message sent to the admin for investigation and possible suspension
* A reset password option will ask for the username and show the first and last 2 digits of the email with five stars to indicate the email with the password reset on the confirmation page.

### 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 set up in person appointments.
* The system shall allow the users to study information and take practice tests.
* The system shall allow staff to give feedback and have that shown to the students.
* The system shall allow access to data that can then be downloaded into a spreadsheet on the local compute for IT admin and Owner.
* The system shall allow the IT admin to suspend and delete user accounts except for Owner and IT admin account.
* The system shall allow users to reset their own passwords and IT admin to reset any password.

### 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 have options for access DMV information and access to practice tests and notes left by staff.
* The interface will be similar between student users with these options.
* Staff users will have access to view completed assignments and practice tests of student users and the ability to leave notes.
* IT admin will be able to view a list of the accounts with options to add new or delete / suspend them in addition to adding or removing rights for each of the accounts.
* All users will need a web browser to interact with this.

### 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?*

* Adding packages, that was discussed to be added later.
* An assumption of minor web browsing capability was taken on the part of student users.

### 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?*

* This is a very rigid design since the only four main features requested are access to learning content, access to practice tests, creating in person appointments, and view staff feedback for student users.
* The resource limitations would be based on the host computer, internet connect, and constant electrical power.

### 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