# CS 255 Business Requirements Document

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 clients are Liam and Ian who are our contacts for their business called DriverPass. The purpose of the project is to provide a training system for students studying for DMV tests.

### 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 to create access for students to view and practice updated DMV guidelines to increase success rate of students at their local DMV’s.
* The system will have downloadable reports access, security settings, administration settings, new user forms, user option presentation, modules for each presentation, and a link to DMV to stay current.

### 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?*

* Take new student driver information and create a profile for that student that has automatic password reset capabilities.
* Have profiles with separate access abilities for administration, IT, software developer, and secretary that have activity logs available to the administrator.
* The administrator profile will have access to change access settings of other users and activate or disable student options.
* Have online appointment scheduling capability that notifies the secretary to verify availability and provide additional support as needed
* Have information for student options presented and the ability for the user to select
* Take payment for the student selected option
* Be Cloud based but have ability to see user data profile offline

## 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?*

* It must be a website that is web-based. Available over the cloud.
* The system should be run at 90+ PSI.
* The system should be updated whenever the DMV makes changes to their manual, when packages need to be updated, or when maintenance requires.

#### 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 platform should run on the Linux cloud and be accessible on every OS platform.
* On the backend, the system will need a website backup, global content SSL Certificate, a website monitoring service, and a web application firewall.

#### 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 user should be able to create a username and password when first accessing the website. The input should be case-sensitive and require a number and a special character. Also, the system should have multi-factor authentication.
* The system should inform the admin immediately of any glitch or problem so that it can be addressed.

#### 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 will allow you to make modifications to users and allow authorized users to remove users without changing the code.
* The system will slowly be introduced into platform updates as a need comes for more features. When Liam, the owner, decides he would like to add new features to the website or if Ian sees a problem to fix.
* The IT admin will have access to backend systems to reset passwords, update security features, troubleshoot, and tweak website information and design.

#### 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 require a username and password to log in, along with multifactor authentication.
* The cloud will be responsible for the data exchange between the client and server.
* The system should disable the account after four incorrect logins.
* If a user forgets their password, they will be prompted to enter the email they used to set up their account, and a password reset link will be sent to that address.

### 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 book reservations when made by the user.
* The system shall provide access to driving learning material.
* The system shall provide confirmation of scheduling.
* The system shall offer 3 driving packages.
* The system will log activity for every user.
* The system will have sufficient speed.
* The system shall provide custom access based on the user and their privileges.
* The system shall show the tests and work the user has 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.)?*

* The interface must provide the customer the option to make reservations for driving appointment packages, take online classes and tests.
* The interface must allow driver pass employees to go in and make changes, and update the system as needed.
* The user should be able to interact with the interface from a mobile phone, laptop, computer, or any device that is capable of internet connection.

### 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?*

* We are making assumptions that all the stuff we are using to build the system will be within the budget.
* We are also assuming we have access to the technical parts needed for meeting all requirements.

### 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 have roughly five months to build this system.
* We don’t know our budget.

### 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*