# 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 purpose of this project is to provide online classes & practice tests to help drivers pass their driving test. The Client is Liam, the owner of DriverPass. Liam wants their system to be able to make reservations for driving lessons online, users should be able to select one of three packages.

### 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?*

* They want their system to run off the web, preferably over the cloud. The problem they want to fix is that they don’t want to deal with the backup and security needed to take care of the system. They just want to focus on running the business with minimal technical problems.

### 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?*

* When complete the system should be able to have driver take online classes, practice tests, and schedule driving lessons from one of three option packages.

## 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?*

* For this specific system a web-based application would be the right fit. Since the system should be available for multiple systems such as mobile and desktop. This would allow the information to be up-to-date and the system would be fast and effective in today’s standard of technology.

#### 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?*

* Platforms that the system should run on should support desktop and mobile devices. To do this the system would need a database to store users’ information. This information can then be utilized by each platform, ensuring that the information is up-to-date and correct no matter what system or platform you own.

#### 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?*

* As stated in my answer before, users will distinguish differently as drivers and staff. These two users are all that is needed as the drivers will be the end users of the system. Whereas the staff will be maintaining the system and daily operations. The system should inform the admin of problems when data isn’t being collected, reservations aren’t working, or overall systems are not operational.

#### 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?*

* For a web-based system making changes to the user by adding, removing, or modifying information doesn’t have to change code. However, this information itself will be rewritten to the database, but the code itself will not need to be changed. Platform updates will have to be scheduled depending on mandatory changes.

#### 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?*

* [To ensure that data is saved with information to login I would recommend using a email and password to login. For a secure connection between client and server we would use a secure socket layer or SSL for short. This commonly used encryption method ensures that data between the client and server is accessible outside the application or website. Another security method would be two-step authentication. This now common practice allows a user to link a cell number to receive a one-time code to login. This code is randomly generated so that even in the case of “brute force” hacking the hacker even with the correct password will not be able to login without the one-time login code. For users who forget their passwords there would be in place a password reset button that would send a one-time code to the link phone number or email. Inside the text message or email would be a link where they must submit the one-time code from which they will be able to reset the password. This system allows for a stronger way of security.

### 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.”*

* User Registration
* User Login
* User Password Reset
* Dashboard
* Scheduling Process
* Data Management
* Analytical Management
* Data Reports
* Communication Options
* Help & Support Options

### 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.)?*

* For needs of this system interface should be easy to use for the end-users. The two users for this interface are drivers & staff. Drivers will need to be able to login, schedule appointments, and contact support. For staff they will have to be able to see appointments, download reports, respond to support messages, and modify appointments & users.

### 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 thing I didn’t address in the design above is how compatibility is so important to the end user. The assumptions I’m making in the design is that the focus is to be that the end-users experience is held with a higher standard then that of a staff user.

### 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?*

* When it comes to limitations, I see with this system the problems with adaptability with staff users. In the transcript Liam says that they want to be able to download reports with software such as Excel. Will downloading reports isn’t an issue from a viewing standpoint, but if changes were to be made with this data having a system to resubmit this back to the web-based system would need to be in place. The major limitation I feel for this project would be time and possibility budget. As far as technology similar systems have been done before, but for DriverPass I feel time to complete the system and cost of development might be a possible limitation.

### 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 graph

Description automatically generated*