# 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 for this project is the owner Liam on behalf of his company DriverPass.
* The purpose of this project is to help individuals study and prepare for an official DMV driving test.
* The system will allow customers to sign up on a company website and choose between 3 different driving packages to help them with their driving prep.
* System should show drivers customer reservations and their designated driver/car pairing.
* There should also be a feature that limits the number of reservations to the number of driver/car pairings at a given time.

### 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?*

* Driver pass wants the system to schedule and show progress of their different packages to the customers registered on their website.
* The overall problem that they want to fix is the driving training of the general populace.
* The different components needed are the following:
  + Company website with a user-friendly interface

### 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?*

* Allow for customers to register accounts as well as schedule, modify, and cancel current appointments.
* Provide package information and pricing.
* Show customer the status of their package progression.
* Provide company with real time updates for all modifications to scheduling and reservations.
  + Also allow for printable activity report.

## 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?*

* The client would like a web-based system that is preferably run over the cloud. This is to accommodate their request for little to no backup/security work to be done on their end. The client would like notifications for updates. The system should also update on it’s own for user completion. The system should run fast enough and have enough bandwidth to be accessible by any number of users be they potential or recurring.

#### 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 client would like the system to be available on any computer or mobile. This means accessible to any device that has web access. A database would be required as you driverPass will need it to store user data as well as a plethora of other various information. Whether the database will be managed by driverPass or the cloud provider the company employs will end up being the company’s choice. The system shouldn’t require any additional back-end tools as these are already supported and provided by most cloud suppliers.

#### 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?*

* Different users will be distinguished by a bunch of different criteria. When first creating an account users will create their own unique username and password. This input would be case sensitive. There are also internal classifications that can be applied to accounts depending on their purpose. (IE. New Users, Worker, Admin, etc..). The system should automatically flag the admin immediately upon finding any unusual activity via the form of an alert or email.

#### 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 IT admin is going to need the highest level of admin access as he is going to be responsible for maintaining the system and modifying it. Updates can be made by the users for their own scheduled appointments bit it (add/remove/modify) without any real issue. The (add/remove/modify) of users can be handled by the IT admin. However, the (add/remove/modify) of modules will need to be handled by a developer or system analyst.

#### 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?*

* In order for the user to log in they must first register with the client. Per the client request this is handled by the customer calling the client and providing a plethora of information (IE. First name, last name, address, phone number, state, credit card number, expiration date, security code) They should also designate a pickup and drop-off location. Once the registration is complete then they will get access to the online system. If the user forgets their password, it can be automatically reset by admins. Any attempts at “brute force” hacking the system should cause flags and notifications to be sent to the admin team. This would allow them to combat the issue quickly and efficiently. There should also be a feature that times out a user/account after x number of login attempts. This would also send a notification to the admin team.

### 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 be accessible on multiple platforms.
* The system shall show the plethora of available packages for purchase.
* The system shall track and show user progression of purchased package.
* The system shall show the driver the customer is scheduled with.
* The system shall notify admins of updates.
* The system shall notify admins of problem/issues.

### 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.)?*

* A main feature is that the system needs to be accessible from multiple devices be they mobile, browser, tablet. etc. The different users of the interface would be the users, instructors, and admins. Users should be able to add, remove, modify their sessions. The user should be able to check their online test progress, personal information, see notes from instructors. Instructors/Drivers should be able to post comments on the driving session as well as times they occurred. Admins should have access to everything and can make adjustments and fixes of almost any kind.

### 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?*

* There were a number of things that were not specifically addressed in the prompt. These include the actual size of the team. We know that we interviewed a few members, but it isn’t stated if and how many additional bodies are going to be able to help with the project. The budget was also something not addressed specifically in the prompt. While not necessarily needed to start planning it is something that would be needed in order to finalize planning.

### 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?*

* Major limitations I see would be resources, time, and budget. We don’t necessarily know what the budget is from the prompt and if it is going be enough to expedite a 5-month project. I am also concerned about the 5-month timeframe. I am unsure if this is enough time to get everything that the client wants incorporated and created. Finally, the size of the workforce would determine if we had enough manpower resources to get this done in a reasonable time frame.

### 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.*

![Timeline

Description automatically generated with medium confidence]()