# 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 is DriverPass, specifically Liam the owner.
* The idea of this system is to train students for the drivers test at their local DMV, since a system of such does not exist.
* train students on and off the road as well.

### 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?*

* The ability to properly train students so that they can pass their driving tests at the DMV as there are a lot of people failing their road test with no actual guidance set in place to aid those who are failing.
* The ability to have a better security system
* Liam wants to have total control over overseeing any changes made on accounts, and the ability to make changes to passwords in case people are locked out
* A reservation system to allow drivers to make reservations for classes and tests

### 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?*

* This system should be able to properly register users and make reservations
* Hold classes for student drivers
* Monitor any changes users are making on their accounts
* To be able to run off of a cloud system
* Have a user friendly UI

## 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 system should run in a web-based environment in order to be able to be accessed off site by the admin users
* The system should be updating constantly regarding keeping track of appointment times and user logins/account creations.
* Scheduling is also something that needs to be constantly updated
* The system should perform weekly checks to ensure it is running as intended with small minor improvements made if need be weekly.

#### 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?*

* Windows is the primary platform this system should run on as this is the most efficient and widely used among users.
* There needs to be a backend database that will hold all the information and store any changes made throughout the system to a log for ease of access in case there are any problems.
* Code should be saved also in terms of software iterations. For example, if version 2.0 is released, code for the previous versions should be stored in case there needs to be a revert back to an old build.

#### 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?*

* User’s will be displayed according to their names, usernames and emails.
* In terms of users that have control over the backend of the system, i.e not customers, it is possible to assign roles within the web-based application in order to differentiate users. For example, an IT guy will have access to different tools than someone who is just in charge of scheduling.
* Input should be case sensitive, this adds a little bit more to security.
* The admin should be notified of a problem as soon as it arises.

#### 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?*

* It is possible to make changes to users without changing code, but, in terms of new updates and new build iterations, code will always change over time.
* Testing is always done before pushing platform changes through to the end user system.
* IT will need to be able to access everything in terms of accounts, account creation, sensitive information in terms of address and names, any changes made to scheduling, any policy changes or package changes will be implemented from the IT standpoint.

#### 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?*

* Upon account creation there will be security questions, possible 2FA, a password, and unique username.
* To log in, username or email will be used as well as a password.
* Between client and server, there has to be encryption in order to ensure the security of information being exchanged between the two.
* The account will have to be temporarily locked if there is a brute force hacking attempt. This will be sent to the IT department in order to help the customer get their account back in working order, with recommended steps in order to ensure this doesn’t happen again.
* If a user forgets their password, the customer can send an email to the IT department in extreme cases, otherwise, there will be a system in place that will allow a email to be sent to the users email that will ensure that that is their account, as well as a page to change the password upon account verification.

### 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 allow users to schedule appointments
* The system shall allow admins to access data anywhere
* The system shall allow users to view their account and make changes as needed
* The system shall users to view packages

### 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.)?*

* Shows information
* Shows the online test progress
* Shows driver notes
* Shows a selection for special needs
* Shows a driver photo as well as the student photo
* Different users include customers, students, admins, IT, employees.
* Students and customers will need to be able to log in, schedule appointments, see progress, see any upcoming events. Employees, admins, IT will need to be able to access things such as scheduling, account information, any updates/changes customers or students have made.

### 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 ability to seamlessly be able to connect to this website without any hitches or incompatibility on the users end.

### 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?*

* Time and budget are things that can always be wanted to increase. Having more time in many cases will help minimize a lot of the bugs that may seem to pop up during end user use and having the budget will allow for better more cost effective ways to develop a product and give more optimization within the application that will not only have less of a restriction towards the users, but also allow the admins and employees more of an ease of access in terms of managing the software.

### 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.*

