# 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?*

* DriverPass is a Driving School business.
* DriverPass seeks to create a solution that aims to provide online support to aid drivers in passing their drivers’ tests at the DMV.
* The solution will also enable the user to make reservations for on-the-road lessons.

### 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?*

* Too many people fail their driving tests at the DMV. DriverPass aims to fix this by providing online classes and practice tests in addition to their on-the-road lessons.
* Web-based. Cloud application.
* Administrative hierarchy. Admin (Owner/IT) -> Employee (Secretary) -> Customer (User)
* Activity history for reservations in a printable format.
* Package based booking system.
* Password management
* Connection for DMV compliance
* See client provided picture for main interface design

### 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?*

* Admin and Employee accounts are able to edit booking information.
* User account is able to book a driving lesson.
* Application is online and can be accessed over the internet.
* Can print out an activity report.
* Admin accounts can reset passwords.
* DMV connection is tested and alerts admin properly.
* Client okays interface design.

## 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 system should be web-based and accessible 24/7.
* The system’s speed should only be limited to the speed of the user’s connection to the web.
* The system should be updated accordingly with DMV policy updates.

#### 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 system should run off of the cloud. There should be no upkeep required by DriverPass to keep the web application online.
* As a cloud application to run off of the cloud via a provider such as AWS, Azure, or GCP, no tools are necessary but an IT admin experienced in such a platform is recommended.

#### 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 should have accounts that are respective of their position at DriverPass, or if they are a customer.
* User IDs and passwords should be case-sensitive to promote a more secure environment.
* The admin should be alerted when a reservation is canceled.

#### 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?*

* A developer or system analyst is required to add/remove/make modifications to the user.
* As the owner stated, the IT Officer is responsible for “maintaining the system, modifying it, et cetera”. To this end the IT Admin role should have the same level of access as the owner (full access) so that they may perform their duties as the need arises.

#### 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 system should have a hierarchy of users with different rights and roles.
* Only the admin account has full access over accounts.
* If an employee is terminated their access should be blocked.
* The admin account should be the only account with the ability to reset other users passwords.

### 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 track user activity.
* The system shall allow customers the ability to make/cancel/modify appointments online as they wish.
* The system shall allow DriverPass to disable package(s) they no longer want to offer.
* The system shall allow users to automatically reset their passwords.
* The system shall notify DriverPass when the DMV updates its regulations.
* The system shall create a profile for the customer containing their name, address, phone number, state, and credit card information.

### 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 should show the customers test progress, scores and status.
* The interface should include a section for drivers to make notes.
* The interface should include a photo for the driver as well as the student.
* The interface should include the student’s profile information (name, address, phone etc.)
* The interface should include a section that lists any special needs the student might have.

### 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 system will have a secure login with authentication to protect student and employee data.
* DriverPass will have the means to print out the activity report in the format it is constructed (likely xls).
* The users will have a sufficient internet connection.

### 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?*

* The packages DriverPass offers will be hard-coded, as opposed to creating an entire system that allows for an unskilled operator to edit them.
* Customization options are limited to services that the chosen cloud provider offers.
* As a web based application an internet connection is required for use.

**Gantt Chart**

