# 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?*

* Our client, DriverPass, needs a system which can provide driver training to their customers for the driving exam at the DMV. Their system needs to offer online classes and testing, and on the road training functionality. DriverPass also wants to be able to access their system data online and offline, being able to download their reports for at home work on Excel.

### 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 their system to be able to provide better training to aspiring drivers and takers of the DMV’s tests. The company will offer to its customers the ability to take online classes, practice tests that align with DMV standards, and on the road training. The system will be used by 3 different types of people; customers, system admins, and employees.

### 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?*

* Customers can access online classes, training, tests, and in person training.
* Employees can access the data needed to do their jobs.
* Administrators can manage user and employee accounts, as well as the security and data in the site.
* Customers can make reservations for their needs, as well as track the employee matched to them.
* The system needs to be secure at all levels of access and have the capability to hold different tiers of access.
* User activity needs to be able to be tracked.
* Data should be able to be downloaded to be used offline.

Measurable tasks for these objectives will include:

1. A developed UI that customers can use to access their needs like practice testing and training.
2. A developed employee UI that employees can use to access the data involved in doing their job in the system.
3. Creation of a reservation system where customers can make reservations, and track the employee matched with them.
4. A developed administrative UI that administrators can use to provide employees with different levels of access and manage security and data.
5. Creation of a security system that allows for different levels of data management and access for employees.
6. Development of a tracking system for employees to track user activities.
7. Creation of a data management system which allows the client to download data offline for use at home.

## 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 will be web based, a website that is over a cloud system.
* The system should be reliable and quick, for customer satisfaction.
* The system should be updatable whenever it is needed if DriverPass wishes to add features.

#### 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?*

* This system should run on the Linux platform, as it is the most feature abundant platform.
* This system will require the cloud to manage a database for its customers, as well as easier security functionality.

#### 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?*

* Users will be distinguishable through their unique usernames and passwords upon beginning their account on the website. Input to this will absolutely be case sensitive for security. The system will inform the administrator of problems immediately, such as security breaches, bugs, glitches, or user issues for the least downtime possible.

#### 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 for administrators to alter account’s access to the site, as well as remove users from the site without changing any code.
* The IT administrator will have complete access to all functionality of the system, so they can make changes as necessary, or change employee/customer access.
* The system will adapt to platform updates as the need for new features presents itself. Users can provide feedback to administrators to allow admins to get an idea of what is wanted.

#### 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 need to create a username and password, as well as pass bot authentication tests to log in to the system.
* The cloud will secure the data exchange from client to server, as well as backup information.
* Brute force hacking attempts will be disabled by setting a limit on login attempts (possibly 5).
* If the user forgets their password, they can send an email to themselves to reset their password.

### 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.”*

* System can book reservations when the user makes them.
* The system connects employee to customer and displays this to both.
* The system allows practice testing up to DMV standards, as well as classes for customers.
* The system runs at speed, as well as efficiently.
* The system has different tiers of access that can be changed by administrators.
* The system can validate user credentials for security when logging in.

### 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 needs of the interface include allowing customers to make reservations, take their classes or tests, provide photos of themselves, and see the employee that is matched with them. They also need to be able to see their testing progress, their personal info, and the employees’ previous notes on their progress or needs.
* The interface should be interactable through any device that can access the web, like a laptop, phone, or PC.

### 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?*

* Assumptions made are access to the cloud, employee’s training and experience with online systems, and a budget to build the overall system needed for a successful experience for customers.

### 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?*

* Limitations for their system include things like:
* Time, only five months was given to build this system.
* Money, as no budget was given for the system.
* Training, as the employees may not understand the system.

An agile approach will be needed, as we need team work and great communication to achieve the needs of DriverPass in a reasonable timeframe.

### 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 project

Description automatically generated*