# 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 purpose of this project is to create a web-based training service for individuals who are looking to receive their driver’s license. The client is DriverPass and they want their system to be able to provide online driving lessons for the written exam, practice exams, and schedule in-person driving lessons with an instructor.

### 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 to create a business that helps individuals pass their drivers exams and they want the system to provide online classes, practice exams, and in-person driving lessons. The components include a system to host an online education portal, a scheduling system for the instructors and trainees, they need a database to store personal information securely, and it needs to be accessed anywhere and everywhere.

### 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?*

* The measurable tasks that need to be included in the system design are developing interactive online modules with videos, quizzes, and simulations that the users can access and complete, implementing an online booking system where the users can select the package that they wouldlike to enroll in and allow them to choose specific dates and times for their driving lessons. Implement role-based access control (RBAC) to define permissions for admin (Liam), IT officer (Ian), the secretary, and the customers. Include functionalities for password reset and account management and implementation of activity logging to track the completion of tasks, lessons, and quizzes. The user interface (UI) should also be user-friendly and that follow the client’s wants and needs.

## 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 to be able to access this from anywhere and be able to download reports for offline use. A cloud-based environment like AWS would be able to provide access anywhere without the need for on prem servers.

#### 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 is meant to be a web-based product that should be able to run on any operating system, internet browser, or mobile device. The back end will require a database to track client personal information, billing cycle, & scheduled appointments. Since this will be web-based, it will need a web server side to manage requests and process the responses needed for the client.

#### 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?*

* The system will have role base access control. Based on what the role that was designated to that profile, the system will be able to grant different access. For industry best standards, having case-sensitive input is paramount. The system should alert the admin immediately if there is a problem.

#### 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?*

* Making changes to user information should only affect the back end database and not the code that is tied to it. The IT admin will need full rights to the system to make updates to system, fix the database, delete old profiles, etc. The system should adapt well to platform updates since it will be created via the cloud.

#### 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?*

* Multi-Factor Authentication will be utilized to aide in combating brute force hacking on top of a unique password. In addition to that, the application will be required to use HTTPS for a secure protocol so data can transfer between the client and the server. While setting up the user profile, security questions will be asked so the user can verify it is them who forgot the password. Then they will be able to update it to a new one.

### 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.”*

* [Insert text]

### 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 clients need to be able to utilize the interface over any kind of device. Seamless transition between desktop, laptop, tablet, and mobile needs to be prevalent. The client will need to be able to log on and create a profile, sign up and pay for specific packages offered, and schedule driving lessons with a qualified instructor. The admins will need to be able to access all the information from the clients. They will also need to be able to make post and make updates to the educational material. In addition to that, they need to be able to reset/delete profiles, issue monetary returns, and ensure the system is working properly.

### 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?*

* Some of the user assumptions being made is that they will be able to use the application easily or they have an infinite amount of access to the internet. The biggest assumption made is that the admins not only know how to navigate the site but also know how to maintain the systems.

### 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?*

* DriverPass is currently limited to 10 cars, so depending on how quickly this business model takes off their might come a time where there are scheduling conflicts. Due to this being a cloud-based environment, the cost has tremendous scalability depending how many people are using the application. The same goes for the technology involved too. Based on DriverPass being brand new it can start at a cheaper cost and scale based on business success.

### 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 close-up of a project

Description automatically generated*