# 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 starting a company is to offer online classes and practice tests, as well as optional on-the-road training options for customers to pass their driving test.
* The Client is DriverPass and they would like the system data to be accessible from anywhere online or offline.

### 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 would like to train drivers to be able to pass their driving test.
* The problem is there is a void in training through the DMV. The goal is to close that and offer training so that drivers can get the information they need to pass their test.
* This system requires various components including a registration component, scheduling component, payment component, study material management component, and practice test management system component.

### 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 system should facilitate easy online registration for all DriverPass services, booking in-person training appointments, while also providing access to study materials and practice exams.
* The measurable tasks that need to be included for DriverPass that needs a secure, user-friendly system for client registration and scheduling, ensuring safety and ease of use for both clients and employees.

## 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 a web-based system that will function in the cloud. The cloud system should handle most of the security operations and backups.
* The system should be fast enough to handle requests back and forth. There should be enough speed for taking the online practice tests.
* As soon as updates are available, upgrade operating systems and security apps, among other essential software, to guard against vulnerabilities.

#### 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 server would run on Linux. The application itself would be able to run on all major browsers. It will also run on IOS systems and Android systems for mobile devices.
* A database will be required to store the information needed for the application to store user data and appointments.

#### 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 be able to distinguish between different users based on email addresses and user data.
* Input will be case-sensitive to be able to create unique user names and passwords.
* The system would notify the admin anytime a user tried to login and failed more than three times.

#### 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?*

* Changes need to be made if a user needs to update there information like their address or a change of their email address.
* The test team would apply the updates in a separate environment to test whether they will have a negative impact on the system
* The IT admin would need access to all systems. They would need to address all needs of the users and the system itself.

#### 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?*

* A user would need an email address or username and a password to gain access to the system.
* To have a secure connection HTTPS protocol would be used. By confirming the identities of the server and the client, this protocol creates a secure connection and uses cryptographic methods to thwart forgeries, manipulation, and eavesdropping.
* Traditional brute force attacks use password guessing to gain unauthorized access to an account, which would lead to account lockout due to lockout policies limiting unsuccessful attempts.
* They will have the ability to reset their password by verifying information to regain access to the system.

### 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 user to reset passwords.
* The system shall protect user information.
* The system shall display student information.
* The System shall be updated when the DMV makes changes.

### 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 needs Online test progress, student information, Driver notes, Special needs, and photos of driver and student.
* The users and the administrators.
* Users will be able to make reservations for driving lessons, change their information.
* They will be able to interact over mobile devices and also on a desktop.

### 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?*

* One assumption is that the application will work for both android and IOS
* One assumption the system will remain accessible 24/7.
* One assumption is the it will work for older mobile devices.

### 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?*

* There is a limit of 10 cars for students.
* A limit could be the price point for each package.
* A limit could be the 2 hour window of the driving section.

### 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.*

