# 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 system to help student drivers pass their test at the DMV
* The client is DriverPass. They want to create a system in which student drivers have access to training such as online classes and practice tests. As well as the ability to schedule practice drivers, so that new drivers can pass their test at the DMV

### 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 the system to have the following:
* To be accessible from anywhere, online as well as offline
* Accessible on mobile and computer devices
* Ability to download reports using Excel.
* Admin Management in which they have full access over all accounts, so that they can reset passwords, and give/block access.
* A tracking system to track reservations.
* The ability to disable a package if they do not want any more customers registering for it.
* The DMV constantly does changes, to they want to be able to connect to the DMV, so that they can receive updates about new rules, policies, or sample questions.
* The system will be run over the cloud
* A form, so that they can collect the information needed for each student driver.

### 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 be able to allow student drivers to take practice tests on the platform, schedule on the road lessons, review any updates to policies from the DMV, and admins should be able to track the progress of each student driver.
* The tasks need to be divvied up to the applicable members.
* Each task needs to have a system in which it showcases how much time will be needed for each task.

## 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 run on a cloud-based infrastructure to support web access via browsers and mobile applications.
* The system should provide seamless interactions, with response times under 2 seconds for all major operations.
* The system should run updates monthly or as needed to incorporate DMV rule changes or security patches.

#### 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 platform that the systems should run on windows, MacOS, Android, and IOS devices. Chrome, Microsoft Edge, etc.
* The back-end would require a database such as MySQL or PostegreSql.

#### 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 would distinguish users by unique credentials. No credentials should be the same.
* The input fields will validate data types and formats; therefore it will be case sensitive.
* The system would inform the admin of a problem if there are more than 5 failed login attempts within a 5 minute window.

#### 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 admin shall be able to add, disable, or modify without requiring code changes.
* The system shall adapt to platform updates by using cross-platform technologies like React.
* The IT Admin should have full access to manage user accounts, view system logs, and enforce security measures.

#### 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 must log in with an email and password. Two-Factor authentication will be optional.
* All data exchanges shall use HTTPS and be encrypted using TLS protocols.
* If there is a Brute Force Attempt, accounts shall be locked after five failed login attempts, with a notification sent to the registered email and Admin.

### 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 allow users to:
* Take practice tests and track their progress
* Schedule, modify, and cancel driving lessons.
* Access updates on DMV rules and regulations.
* The system shall allow admins to:
* Reset User Passwords and manage accounts
* Disable packages to prevent new registrations.
* Generate and download reports in Excel Format.

### 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.)?*

* User Roles**:** The interface will support four user roles: customer, secretary, admin, and IT officer.
* Customer Needs**:** Customers shall view their progress, book appointments, and update account details.
* Admin Needs**:** Admins will manage accounts, view reports, and control system features via an intuitive dashboard.
* Access**:** Users will interact through web browsers and mobile apps​

### 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?*

* All users will have access to the internet for primary functionality, although limited offline access will allow for basic viewing of stored data.
* Customers and employees will be trained to use the system effectively.
* The DMV will provide timely updates for integration​

### 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 limitations that I see would be:
* Offline functionalities will be limited to viewing stored data, modifications require internet access.
* Budget constraints may limit advanced features.
* Development must adhere to a tight schedule, limiting the scope for additional features.

### 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 graph with blue squares

Description automatically generated with medium confidence*