# 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 client for this project is DriverPass. We will be working with Liam the owner of DriverPass and Ian, the IT officer of DriverPass.
* The client wants to create a new system for their customers to be able to access online classes and practice tests.
* The client additionally wants an option for customers to be able to select on-the-road training with DriverPass instructors.
* DriverPass wants to help its customers successfully complete their driving test with 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 offer customers a resource to be able to study, take practice tests, and options to have on-the-road training with their instructors.
* DriverPass aims to help their customers pass driving tests at the DMV.
* The system will allow customers to choose the package they want, take practice tests, schedule appointments for on the road training, and track their progress.
* The system will allow employees of DriverPass to add, remove, or reschedule appointments while also being able to leave comments from on the road training.
* The system will be web based and use the cloud.
* There will need to be a secure set up so customers will be required to log in and have the ability to change their password.
* There needs to be options for administrator and maintenance.
* There also needs to be an option to download reports for offline work for the administrator.

### 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 will be able to choose the package they desire and purchase the package online.
* Customers will be able to create an account, change their passwords, and login.
* Customers will be able to schedule, change, or cancel their appointments online or over the phone.
* Employees will be able to schedule, change, or cancel appointments for customers.
* Employees will be to view details such as the driver, appointment times, and vehicle which a customer has scheduled.
* The driving instructors will be able to leave comments from their training sessions that the customer can review as well as notate lesson time, start time and end time.
* The owner can download reports for offline work.
* Customers will be shown availability for appointments.
* The owner can see who changed what in the system.
* The owner can reset accounts passwords or block access to employees no longer with DriverPass.
* The system should have an option to disable, add, remove, or modify packages offered to customers.
* The system should update with the DMV policies and update the DriverPass team when something changes.

## 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 is web based that uses the cloud.
* The website should run quickly and smoothly between pages or screens.
* There should be information updated whenever the DMV adds, removes, or changes information to stay current.

#### 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 on Windows or Linux for the most secure and up to date experience.
* There would be a need for a database to store records, most likely there will be one with the cloud service selected.

#### 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?*

* Each user will have their own unique login ID and password.
* Passwords will need to be case sensitive, require at least one number, and one special character.
* The admin should be notified immediately of any potential issues.
* There should be an option for two step verification, changing passwords, and account recovery.

#### 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 changes to the user without changing code.
* The system will automatically update information as needed.
* Packages can be disabled, removed, or added as needed.
* The IT admin will need full access to the systems servers and code to troubleshoot issues and make updates.

#### 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 will be required to have a unique ID or username, and a password.
* Cloud services will help provide secure data transmission between the server and user.
* There will be an option for two step authentications.
* If a new or different device is detected or a different IP address, the system should prompt to send a code to the user for validation.
* After several failed logins or password reset attempts, the account should be locked for a short time.
* The IT admin should receive an alert if an account is locked due to a hacking attempt.

### 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 users to schedule appointments with a driver
* The system shall allow users to take practice tests.
* The system shall allow the admin to make changes to user accounts.
* The system shall be updated as needed.
* The system shall allow the user to view past exams.
* The system shall allow the user to cancel or reschedule appointments.
* The system shall allow a user to checkout.
* The system shall notify the admin if there is an issue.
* The system shall lock an account after several failed login attempts or password reset attempts.

### 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 admin user needs to be able to update customer information, disabled packages, add new packages, print reports, troubleshoot the system.
* The secretary user needs to be able to make appointments, cancel appointments, reschedule appointments, and assist customers.
* The customer user should be able to sign up for and modify appointments, take tests, view past tests, read information, and update their information.
* The website should function with any browser on any device so that it can reach many different customers.

### 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?*

* Accessibility options for users.
* Options for different languages.
* The budget is large enough for everything.

### 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 amount of time for completion is strict.
* The budget is unknown at this time so there may be a change in plans if everything doesn’t fit in the budget.
* There may be a need for additional team members to finish the project.
* We may not have all the requirements needed by the client at this time and the requirements could change.

### 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 graph

Description automatically generated*