# 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 project is to design a system that will help drivers take online driving classes to prepare them for upcoming drivers tests.
* The client is DriverPass and they would like their system to do the following:
  + Allow users to take drivers online classes and provide practice tests for people that are getting ready to take their drivers test.

### 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 give users access to course content that will aid in passing drivers’ tests. They want people to be able to select from a range of available classes DriverPass has to offer.
* A problem they want to fix is filling the void in online drivers education courses and make them available for student to help in passing their drivers’ test.
* Components would include:
  + User interface,
  + And employee interface ( if one needs to be separate from the user interface)
  + Database for user information and course related data,
  + A system to manage integrations / connections between the database and the interfaces.

### 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?*

* DriverPass would want to be able to access the system from anywhere, even offline.
* Download and retrieve data and generate reports.
* Give access to employees depending on certain roles.
* Keep audit records of changes made by clients.
* Wants the user to be able to modify appointments online.
* Maintain packages that would be offered for training.
* Take and store personal information (including):
  + first name, last name, address, phone number, state, and their credit card number, expiration date, and security code
* Stay connected to the DMV to keep training as up to date as possible, and get notifications when updates are available

## 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?*

* A web-based application for the users to update appointments.
* System should be able to give the users information in real time. Users would expect to retrieve and update appointments and lessons quickly.
* The system should be updated as often as possible. Mentions of DMV requirements changes mean that the updates should be as the DMV updates as a minimum.

#### 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 needs to run off the web. So the system needs to run on popular web browsers.
* There needs to be a database that houses customer information.
* There should be a cloud-based server that will be an access point for the lessons plans.

#### 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?*

* We can distinguish customers be either a generic unique ID, or a drivers license ID number. To be consistent, the IDs would not be case sensitive.
* The system should automatically handle issues such as password resets for customers.
* The system should at minimum send the admin if any type of user encounters an issue.

#### 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?*

* Users should be able to register to add and modify their own accounts.
* The system will be getting updates for requirements from the DMV .
  + This could be done by utilizing any API’s that the DMV may have.
* Developers will need access in order to add of remove certain modules.
* IT Admins will have access to customer records: personal information, class schedules, class records.

#### 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?*

* Customers will use a username and password that will be validated against what is stored in the system.
* We will utilize HTTPS for the website to encrypt data going back and forth.
* For a brute force attack, we will lock out the customers credentials requiring the system admin to reset the password for that user.
* The users can request a password reset.
  + This will send an email to the users address they used when signing in.

### 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 let new users create an account.
* The system shall authenticate login credentials.
* The system shall let the user reserve a class.
* The system shall allow the user to reset their password.
* The system shall make an appointment.
* The system shall cancel an appointment.
* The system shall take a class.
* The system shall record class records.
* The system shall take a practice test.
* The system shall update DMV Requirements.
* The system shall show activity logs of customers.
* The system shall disable packages.
* The system shall generate reports.
* The system shall update modules (add or remove)

### 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 UI should show:
  + customer information,
  + Online test progression,
  + Driver notes,
    - Data like: Lesson time, start hour, end hour and driver comments
  + Special needs,
  + A photo of the driver and student
* The user should be able to add their personal information
* There should be a page that allows the user to contact DriverPass
* There should also be a page that allows DriverPass to contact the student / customer.
* The Customer should be able to Update class registrations, add or cancel reservations
* The users will interface with the application through a web browser.

### 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?*

* We assume that the users will have reliable internet access.
* That the users will have basic knowledge on how to access web sites and manage credentials.
* The user will be the only one accessing their accounts. (Not sharing their credentials with other users)
* We are assuming that the user will be using one of the web browsers that the application was designed to be used on.

### 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?*

* Internet speed between the user and the database.
* Scalability for higher traffic times with reading and writing to the database.
* User lockouts may be a manual process to unlock a user’s account if it is compromised.
  + If done at a large scale, there may be long wait times to get user accounts back online
* Adding or removing modules need to be completed by developers, relying on their schedule to complete those tasks

### 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

AI-generated content may be incorrect.