# 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.
* DriverPass would like to build a system that helps better prepare people for their driving test at the DMV by offering online classes, practice exams and on-the-road training.

### 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 take advantage of a void in the market when it comes to training students for the driving test at their local DMV.
* To offer online classes and practice tests for people taking their DMV driver’s test.
* Offer an on-the-road training class.

### 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?*

* Allow users and staff to schedule appointments for on-the-road training.
* Offer packages with different levels of service.
* Securely maintain consumer data.
* Cross platform functionality.
* Host up to date rules and regulations from the DMV.
* Provide access to online classes and practice exams.
* Allow for data to be downloaded for offline use.

## 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?*

* Web-based service accessed through a browser.
* The system should be updated at least once a month to ensure security and accurate supplemental recourse, such as information from the DMV.
* The system should run fast to ensure users have a pleasant experience interacting with the product.

#### 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 should run on any operating system that supports web browsers.
  + Windows
  + Android
  + iOS
  + Mac OS
  + Linux
* The system should run in any web browser.
  + Chrome
  + Edge
  + Firefox
  + Safari
* The back end would require a database.
* The database will store all customer information and the schedule for on-the-road sessions.

#### 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?*

* Users will need to create an account that is tied to an email address.
* Having the Input case-sensitivity enabled is important to maintain the security of the accounts.
* The user will have a set number of attempts to access their account before it is locked, and the system will alert the admin.
* If an outage in service is detected the system should notify the admin.

#### 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 can be added/removed/modified on the database by an administrator without any change in code.
* The IT admin will have access to the full-stack to make changes and updates as needed.
* The system should be regularly updated to maintain consistency with platform 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 username and password are required for the user to log in.
* The communication between the client and the server will employ an SSL (Secure Socket Layer) connection to encrypt the user’s sensitive data.
* If the user enters their password incorrectly more than 5 times their account will be lock and they will need to perform additional actions to unlock it.
* If a user forgets their password, they can have a temporary password sent to their email or cellphone and reset.

### 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 username and password on login.
* The system shall allow the user or administrator to reset their password.
* The system shall differentiate types of users.
* The system shall be accessible via the internet.
* The system shall lock the user account after 5 unsuccessful attempts to log in.
* The system shall maintain updated DMV rules and regulations.
* The system shall allow users to access online classes.
* The system shall host practice exams.
* The system shall offer different packages for the customers to choose from.
* The system shall allow users and admins to make changes to information.
* The system shall allow users and admins to schedule on-the-road training with an instructor.
* The system shall allows admins to download information for offline use.

### 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 users will interact with the interface through a web browser.
* The different users would be users (w/o account), users (w/ account), and administrators.
* Users (w/o accounts) should see:
  + Home page.
  + Login page.
  + Registrations page.
  + View information about the company
  + View services and classes
* Users (w/ accounts) should see:
  + Home page.
  + Login page.
  + Account details.
  + Class registrations.
  + Account history of classes and exams.
  + Sign up for classes and exams.
  + View schedule of classes or on-the-road training.
* Admins should see:
  + Account information about users.
  + Edit information on the pages.
  + Information about classes and test results.
  + Create and remove accounts.
  + Reset passwords and update accounts.

### 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?*

* Users have access to the Internet.
* Users have access to a computer or mobile device.
* Users are proficient at navigating a website.
* Administrators have knowledge of web development.

### 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 a small start-up, so a limited budget is a factor.
* The company owns 10 cars that need to be maintained and operated well.
* The company has a limited supply of cars available to be scheduled for on-the-road training.
* Time limitation, the company needs the site as soon as possible to start operating.
* Requires internet access to use.

### 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 multiple colored squares

Description automatically generated with medium confidence*