# 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?*

* DriverPass is a company that aims to provide driving lessons, online classes and practice tests, and on-the road training to help those preparing for a driving test at the DMV. The purpose is to address the high failure rate for the DMV driving 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 to provide online training as well as on the road training. They plan to solve this by creating a reservation system that can handle reservations for driving lessons.
* The system should allow the user to access data both online and offline.
* The system should be able to track reservations, including who made them, who cancelled them, or who modified them.
* The system should be able to run off the web and over the cloud.
* The system should be accessed by Liam, Ian to maintain the system, and the secretary to handle reception and making appointments.

### 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 should be able to select a package option for their driving lesson.
* The system should provide a dashboard for the user to display their progress on their training as well as displaying details such as test scores.
* The system should allow users to cancel or modify appointments.
* The system should be compliant with the local DMV regulations and rules.

## 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 environment should be web based to be accessible on various platforms.
* The system should run quickly to quickly schedule users for reservations and quickly pull information such as customer information such as the customer’s schedule driving times and car/trainer availability.
* The system should be updated regularly to address the requirement of “minimal technical problems” and bug fixes. It should be updated to comply with regulatory requirements.

#### 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 be run on various systems such a Linux and windows and various browers such as Google Chrome, Safari, and Edge.
* A database would be needed to store information such as user information, schedule times, and login credentials.
* A web server would be needed to manage HTTP requests.

#### 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 different users based on their long in credentials such as username and password.
* Inputs should be case sensitive in fields such as usernames and passwords.
* The system should inform the admin of a problem as quickly as possible to address bugs and prevent delays.

#### 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 to the user should be made without changing the code by providing admins with a user management interface. Admins would access this their appropriate credentials and must have permission to access it.
* The system should be tested and undergo quality assurance to address issues that might come with platform updates.
* The system should have the documentation to be change to reflect changes as well has having documented code.

#### 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 is required to login
* Data exchange will be encrypted with protocols like TLS and SSL during transit and while at rest.
* Credentials will be authenticated to prevent unauthorized access.
* If there is a brute force hacking attempt, the login function should be temporally disabled until problem is address and should alert admins.
* If a user forgets their passwords, a password reset link would be sent to the user’s email address.

### 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 a user to create an account with details such as first and last name, email address, phone number, and address.
* The system shall authenticate users who log in.
* The system shall allow users to schedule driving lessons with their preferred package selection.
* The system shall allow users to cancel or modify their reservation.
* The system shall allow users to track their progress in their driving courses and tests.

### 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 should be accessible and user friendly to the student, the driver, and the admins.
* The interface should allow the user to easily access their training materials, schedule driving lessons, track progress, and enter payment information.
* The interface should allow instructors to view their training schedule, provide notes and feedback to the student and post grading information.
* The interface should allow admins to manage account information.

### 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?*

* The system assumes the user has internet access and access to a device that can access the system.
* The system assumes that the user has technical proficiency and is capable of navigating the interface.

### 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?*

* I see potential time limitations as the project time is three months.
* I see resource constraints as the project requires various expertise in areas such as UX experience, back-end development, security, and customer service.

### 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 and white text

Description automatically generated with medium confidence