# 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 website that helps train students for their driving test.
* The client is DriverPass and our contacts are the owner Liam as well as the IT officer Ian.
* They want the system to be able to allow students to take online classes and practice tests.
* They also want to give students the ability to make a reservation online to schedule on-the-road training with one of their ten drivers.

### 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?*

* The system wants to do the following:
  + Provide online classes and practice tests.
  + Allow customers to reserve a timeslot for on-the-road training.
  + Allow DriverPass to access data from any computer and download reports.
  + Allow admin roles to reset customer passwords and block access to specific users if needed.
  + Track reservation information in an activity report.
  + Allow customers to select between three different packages.
  + Allow admin roles to disable a package.
  + Save all customer information.
  + Give notifications when the DMV has an update.
* The problem is there is nothing currently on the market that provides training to students for a driving test. This system is designed to fix that.
* The different components needed for this system are:
  + A cloud-based platform to run the system on.
  + A website linked to the system that customers can use.

### 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 do the following for customers:
  + Allow them to create an account.
    - Customers can enter their first and last name, address, phone number, state, and their credit card number, expiration date, and security code.
    - They can include a pickup and drop-off location.
  + Allow them to include a pickup and drop off location.
  + Allow them to select one of the three packages.
    - Package One: Six hours in a car with a trainer.
    - Package Two: Eight hours in a car with a trainer and an in-person lesson to explain DMV rules and policies.
    - Package Three: Twelve hours in a car with a trainer, an in-person lesson to explain DMV rules and policies, access to the online class with all content and materials.
  + Show a webpage with all the following information.
    - Online test progress.
    - Customer account information.
    - Driver notes.
    - Special needs.
    - Driver Photo and Student Photo.
    - Contact page.
* The system should be able to do the following for DriverPass:
  + Allow them to grant or deny access to employees.
  + Track reservations
    - Show which customer is assigned to which driver, time of reservation, and car to be used.
  + Allowed packages to be disabled/enabled.
  + Show information for each customer.
    - Show test information.
      * Test name.
      * Time taken.
      * Score.
      * Status.
        + Not taken
        + In progress
        + Failed
        + Passed
  + Connects with DMV for updated rules and policies.
    - Sends a notification when there is a new update.
  + Shows table in driver notes.
    - Lesson Time
    - Start Hour
    - End Hour
    - Driver Comments

## 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 needs to run in a web-based environment.
* The system should respond to user requests in less than 5 seconds.
* The system should be updated on a regular basis, at least once every quarter.

#### 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 compatible with modern web browsers like Chrome or Firefox.
* The back end should be built using a database like MySQL.

#### 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 should distinguish between different users based on their email address and password.
* The input is case-sensitive.
* The system should inform the admin immediately if there’s a problem.

#### 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 should be designed to allow changes to the user like adding, removing, and modifying users without requiring code changes.
* The system should be designed to adapt to platform updates.
* The IT admin should have full access to the system including the ability to modify users and modify system performance.

#### 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?*

* Users will be required to enter their email address and password to log in.
* The connection between the client and server will be secured with HTTPS.
* The system should limit the number of failed login attempts to prevent brute-force attack attempts.
* If a user forgets their password, they should be able to reset it using their 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 validate user credentials when logging in.
* The system shall allow users to register for a new account.
* The system shall allow users to view and update their personal information.
* The system shall allow users to view their driving history and feedback.
* The system shall allow users to request and accept driving jobs.
* The system shall allow admins to view and manage user information.
* The system shall allow admins to view and manage driving jobs.

### 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 easy to use and intuitive for all users.
* The different users for this interface are drivers, customers, and admins.
* Drivers should be able to view available jobs and accept them, as well as view their driving history and feedback.
* Customers should be able to request driving jobs and view their order history.
* Admins should be able to manage users, view job information, and monitor system performance.
* The user interface should be web-based and responsive. It should be accessible from desktops, laptops, tablets, and mobile devices.

### 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 a modern web browser and internet connection.
* Users have a valid email address and can remember their password.
* Admins have sufficient technical knowledge to manage and monitor the system.

### 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?*

* There may be limitations in terms of budget and resources for building and maintaining the system.
* There may be limitations in terms of the time for developing and testing the system.
* The system may face limitations in terms of scalability and performance under heavy loads.

### 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.*

Chart, timeline

Description automatically generated with medium confidence