# 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 help drivers pass their driving test.
* The client is DriverPass and they want us to help create a website that would assist drivers in studying for their exams by providing access to practice exams. The system would also be mandatory before drivers would be able to schedule their road 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 fix the problem of drivers failing the test on their first attempt.
* The system would need to be accessible online and offline.
* Any changes would need to be made online only to avoid duplicate data.
* System would need to provide access to online scheduling with a user name and password, as well as the ability to call and make appointments.
* Online study materials for the user to study, and keep track of the user’s progress.
* Offer different packages and keep track of drivers and which cars they have used.
* Keep track of billing information.
* System should be connected to the DMV to ensure that it is up to date and remains compliant with all laws and regulations.
* System should use the cloud.

### 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 students to take practice exams, schedule driving lessons and keep track of their progress.
* Prioritize all tasks by level of importance.
* Create a timeline for each team member with their assigned duties, including a start and end date, and make sure that everyone stays within their timeline.

## 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 should operate as a cloud-based website.
* It should provide a user experience that is smooth and free of delays when accessing the site.
* Updates to the system can be implemented whenever the client wishes to introduce new functionalities.

#### 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 to run on all three major operating systems: Windows, Mac, and Linux.
* There should be an online database included as part of the system to allow it to be accessed from virtually anywhere.
* The system will utilize cloud technology to handle all security measures, which includes managing the necessary databases for backend support.

#### 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?*

* When making their initial login to the website, each user would be required to set up a unique username and password. The system should be designed to recognize case-sensitive input.
* Additionally, to enhance security against unauthorized access, multi-factor authentication should be used.
* In the event of any issues, such as glitches or bugs, the system should notify the administrator immediately to ensure a quick resolution to restore the website's functionality as quickly as possible.

#### 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 you to alter user details and delete users without needing to modify the underlying code.
* As the need for additional features arises, the system will gradually receive updates. When DriverPass opts to include new functionalities into the website, that's when the updates to the platform will begin.
* The IT administrator will be granted complete access to the system, which will allow them to make any necessary changes or revoke access from past employees who are no longer authorized.

#### 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?*

* To log in, users must provide their username and password, and the system will also require multi-factor authentication for added security.
* The responsibility for secure data transfer between the client and the server would fall on the cloud service.
* To protect against “brute force” hacking attempts, the system will lock the account after four failed login attempts.
* If a user forgets their password, they will be prompted to input the email address associated with their account, and a link to reset their password will be sent to that email.

### 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 confirm user identities during the sign-in process.
* The system shall facilitate the booking of reservations by users.
* The system shall offer online practice exams and instructional courses.
* The system shall display the specific driver assigned to the customer.
* The system shall present a selection of three distinct driving lesson packages.
* The system shall operate quickly and effectively.
* The system shall grant custom access levels based on the user's role and their permissions.
* The system shall also display the user's completed tests and coursework.

### 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 offer customers the ability to book driving session packages, as well as access online courses and examinations.
* The interface should enable DriverPass staff to enter the system to perform updates and modifications as needed.
* The interface should be accessible and functional on various devices, including mobile phones, laptops, desktop computers, or any other device with an internet connection.

### 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 project team was not provided with a budget for the system, so we are assuming that all the components needed for development, including the Linux environment and cloud services, will be within the budget.
* We are also assuming that there will be easy access to the required technology.

### 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 team has about five months to complete the system's development, but we have not been given a specific budget.
* Currently, the main constraint is the need for additional personnel to develop the website within the five-month timeframe.
* Therefore, I believe using an agile methodology for the project would be the best approach.

### 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 calendar with different colored squares

Description automatically generated with medium confidence