# 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 in this project is the company DriverPass, and they would like us to develop a system that allows driving students to take online classes and practice tests as well as schedule 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 their system to provide the user with online classes and practice tests, as well as allow the user to schedule in-person driving sessions.
* The problem they want to fix is the low passing rate of driving tests at the DMV, by providing new drivers with the proper resources to prepare for the driving test, such as online practice tests and on-the-road training.
* The different components needed for this system are administrative, secretarial, and user accounts. The secretarial and user accounts will be able to make and modify appointments, as the secretary workers may assist people who would like an appointment over the phone and the user should be able to make their own online if they want. The administrative accounts will have access to user information, such as who created or modified an appointment, as well as the ability to revoke access from users and reset passwords when needed.

### 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?*

* When the system is completed, it should be able to display a user interface page containing online test progress, driver notes, student information, student special needs, a driver photo, a student photo, and the company logo at the top.
* When the driver notes are selected, it should display a table containing lesson time, start hour, end hour, and driver comments.
* The user should be able to make and reschedule reservations for two-hour driving appointments.
* Create a page that allows communication between DriverPass representatives and the user.
* Create an input form webpage where the user can input their information such as first name, last name, and address.

## 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 be web based.
* The system should use cloud-based data storage.
* The system should be fast enough to recognize simple user input almost instantaneously.
* The system should be updated whenever new features are added.

#### 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?*

* By using a web-based platform compatibility is simplified, and the system should be able to be accessed from almost all platforms. Windows, Mac, Linux, and mobile devices.
* A cloud-based database would be the most efficient for this type of system.

#### 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 distinguish between different users with user IDs and user passwords, that each user can create themselves when creating an account.
* The system should always inform admins immediately whenever there is 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 will provide functionality to add, remove, or modify user accounts without changing any code.
* IT administrators will need full access so that they can make any necessary changes, such as resetting a user’s password for them, or revoking access from a previous employee.

#### 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?*

* For the user to log in, it is required that they provide the correct username and password for their account. To further ensure security we should implement two factor authentication.
* By using cloud-based data storage, we can ensure that the connection for data exchange between the client and the server is secure.
* To prevent brute force hacking, the system will disable an account after ten incorrect login attempts.
* If the user forgets their password, they can select the forgot password option, where a password reset link will be sent to their email address, if they no longer have access to that email address, they will need to contact customer service, so that someone with administrative access can reset their password for them, after their identity has been verified.

### 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 verify user password and username when logging in.
* The system shall provide practice tests and courses to the user.
* The system shall track and display progress for tests and courses.
* The system shall create reservations requested by the user.

### 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 user interface should display test progress and driver notes to the user.
* The user interface should allow the user to make and modify in-person reservations.
* The interface should allow administrators to make changes to user accounts and the system.
* The user interface should be compatible with Windows, Mac, Linux, and mobile devices, as well as any device that can access an internet 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?*

* When designing this project, I am assuming that the future users will be able to access the internet.
* I am also assuming that the future users have some sort of device to access the system, whether is a computer or a mobile device.

### 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?*

* One limitation is time, the start date began on January 22nd, and the system must be delivered on May 9th, and signed off on May 10th. Although this does seem like a reasonable amount of time, it is still a limitation.
* Another limitation would be resources, specifically employees, as it is unclear how many developers are working on this project.

### 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 graph

Description automatically generated with low confidence