# 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, DriverPass wants to create a tool that could better prepare student drivers for success when they take their driver's exam. The purpose of the system is to create a user-friendly learning environment for student drivers that will ultimately train them for better success when they take their driver exam. 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 feels that students are not properly prepared for their drivers exam and they would like to build a system that offers a solution to that.
* The system should allow students to subscribe for, access and track learning modules that will help them prepare for the DMV driver's exam.
* In addition to accessing online modules, the system should also allow students to book, schedule, and pay for real driving courses online.
* Certain authorized users should be able to access data in real time so they can know when someone has booked, modified, or cancelled a reservation.
* The system should also allow administrators to see the name of the driving teacher, real time location, and estimated arrival times for each reservation.
* Certain administrators should also be able to access reports that can be worked on from any location.
* Administrators should also be able to help with forgotten or lost passwords. In the event that a user forgot their password, admin should have permission to reset those passwords so that the users can re-gain access to their accounts.
* The system should allow administrative accounts with special and specific permissions, including the admin permissions mentioned above.
* The system should allow student accounts where students can book and manage reservations as well as course work
* The system should allow driver accounts where teachers can record progress and notes for each student driver.
* The system should allow a secretarial account where a secretary can make and manage reservations that are called in over the phone.

### 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 when completed:**

* Automate traditional scheduling processes.
* Track users' statuses
* Track reservation information including what driver is with what student, how long they have been gone, where they are in real-time, and estimated time remaining.

**To satisfy the above objectives the following must be completed:**

* The system should offer scheduling services for driving lessons.
* The system should offer online modules that offer learning material and practice quizzes.
* The system should have some sort of tracking ability where anything logged in the system can be accessed by administrators. Administrators should know who made any changes, when said changes were made and what changes were made.
* The system should allow users to register for their courses either online or by calling and scheduling with the secretary of the company.

## 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 and accessible across multiple different operating systems.
* The system should run quickly with little to no lag to ensure quality user experience.
* The system should be updated often in order to remain secure and to keep up with the DMV’s latest exam 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 support all systems so that users can use the system on the technology they already own and are comfortable with.
* Multiple platforms such as mobile devices, laptops, and PCS should be support.
* The system should have a database, or multiple databases, that keep track of user information, system changes, driver information, etc..

#### 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?*

* They system should have a high level of accuracy and precision.
* Different accounts with different permissions should be created for admin, secretaries, drivers and students.
* Username input and password input should be case sensitive to ensure maximum security efforts and help to prevent attacks.
* The system should inform the admin if a user is locked out of their account so that the admin can help the user get back into their account.

#### 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 easily customizable in order to support future needs within the company.
* User changes should be customizable by IT admin without having to change code.
* IT admin should have the highest level administrative access.
* The system should quickly and easily adapt to platform updates in order to maximize user experience.

#### 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?*

* The user should have a custom username and secure password that they use to login to their account.
* The connection between the client should be secure by using encryption methods and secure coding practices.
* If a brute force attempt was made on an account, admins should be notified immediately so that they can temporarily lock the account.
* If a user forgets their password, they should be able to reach out to admin to reset their password or they should be able to use a “forgot password” link found on the system page

### 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.”*

### 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 system shall be user-friendly for all account users.
* The system shall have separate accounts for admin, secretaries, drivers and students with different roles and permissions for each account type.
* The system shall allow admin accounts to be able to track all activity done within the system as well as track reservations. Admin accounts should also be able to reset user passwords.
* The system should allow secretary accounts to make, edit, modify or cancel reservations. Secretary accounts should be able to see driver and student information such as name, status, availability, etc.. Secretary accounts should not be able access certain secure information such as payment details.
* The system shall allow driver accounts that allow drivers to accept student reservations and record progress and notes on each session.
* The system shall allow student accounts where students can initially sign up and log in with a secure username and password, purchase and access learning modules and practice quizzes, purchase and make, edit, or cancel reservations for in-person driving lessons, and upload documents for verification.
* The system shall allow all users to interact with the interface as long as they are using some technology that has a stable internet connection.
* The system shall allow users to interact with the interface from a mobile device or through a web 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?*

* The system shall be able to support a large number of users at one time with minimal or no lag time.
* The system shall be accessible to any user with relatively modern technology that has internet connection.

### 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 system will not operate without internet access.
* The system will not allow data uploads without an internet connection.

### 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 gantt chart with many tasks

Description automatically generated