# 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?*

* Provide information to users that pay (study materials, practice tests)
* Provide avenue for scheduling driving practice (user side and business side)
* Track progress of practice tests for users
* Provide contact information for the business.

### 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?*

* Track changes made to each account in case of errors.
* Fix the need for better driver training.
* Make reservations for driving lessons (user and business side)
* Identify the driver the customer is scheduled to go out with
* User modifications to appointments
* “Forgot password” feature.
* Connection with DMV to remain up to date with current laws and regulations
* Cloud based system.
* Ability to contact user.
* Driving instructor access to fill in notes for the student’s account.

### 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?*

* Make and modify reservations with the necessary information
* Reset user password if needed.
* Driving instructor notes modification
* DMV updates
* Contact users as needed.
* Set user to driver as needed.

## 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?*

* System must run as a web-based environment that can be accessed with any internet connection.
* Instantaneous speeds are not mandatory but should attempt to achieve as fast of a speed as possible
* Updates should be implemented as needed. When changes in the DMV rules are made, the system should be updated to reflect the changes.

#### 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 will operate on a cloud-based platform.
* A central database will be necessary for keeping track of reservations.
* A tool to keep track of any changes in the DMV rules should be implemented to ensure the most accurate up to date information.

#### 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?*

* A base “customer” level of access should be implemented for each user.
* A unique username for each user should be created so that the further rights and access may be given to each username as needed. The IT officer should start with full access to all accounts and is in charge of giving permissions as needed.
* A password for each user should be created that is case sensitive to increase security.

#### 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?*

* Employees should be able to access and change user reservations upon request.
* The system should be able to reset passwords through a link sent to an email address.

#### 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?*

* Each user must create a unique username that is not case sensitive
* Each user must create a case sensitive password.
* Each user must verify an account through a link sent to an email address
* A link to reset a password can be sent to that same email address if it is forgotten
* After 5 attempts with a wrong password an email to account will be locked out and an email to reset the password will automatically be sent to the established email address. A message will be sent to the IT officer as well so further investigation can take place if necessary.

### 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 correct username and password combination.
* The system shall display online test progress for currently incomplete tests, completed tests, a table for lessons taken and driver comments, a logo for the business, special needs, driver photo, student photo, and the users information
* The system shall display a page with contact information
* The system shall allow each user to make change or cancel a reservation
* The system shall print out a report of the changes made to a reservation when requested by a user with the proper privileges.

### 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.)?*

* All interfaces will be accessible with any device that can connect to the internet
* All interfaces will start at a login page for each user to put in a username and password
* The customer interface will consist of a homepage with a menu to toggle between the homepage, the contact page, and the reservation page
* The home page shall display online test progress for currently incomplete tests, completed tests, a table for lessons taken and driver comments, a logo for the business, special needs for the user, driver photo, student photo, and the users information
* A page with contact information shall be created.
* A page to create and modify reservations shall be created.
* Employee interfaces will have access to customers information through a search option.
* Employees will have the same ability to create and modify reservations as requested by the customer

### 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?*

* Students making reservations have a valid driver permit.
* Users have access to the internet or phone to make reservations
* Users have a valid email address.
* Users have a valid credit card.

### 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?*

* Reservations for driving lessons must be within a reasonable distance of the office.
* The system will not work without internet access.
* The student cannot directly contact drivers after the lesson is complete.

### 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.*Timeline

Description automatically generated