# 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 build a system for DriverPass to help train student drivers before taking the test at the DMV.
* DriverPass wants to take advantage of the lack of training for student drivers and provide a better training option
* Provide an option for 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 to take advantage of the lack of training for student drivers and provide a better training option
* DriverPass wants a system that can allow customers to make reservations for online classes, driving lessons, and take practice tests.
* Track all the reservations
* Allow customers to edit reservations
* Provide roles and access to different employees
* Offline Changes to the system data are not allowed

### 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?*

* Track all customer’s activity on the site
* System should be able to be accessed from anywhere
* allow customers to make reservations for online classes, driving lessons, and take practice tests.
* Allow admin to access data from anywhere (download reports)
* Allow customers to pick what driver, or car they prefer
* Test and practice are current with what DMV requires
* Provide progression status to students who are taking classes and tests online
* Provide failed or passed status when students complete tests or classes

## 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 updated often or any time a change is made. When a reservation is made, DMV updates its guidelines, or when any changes are made to a customer account.
* The system needs to be web-based for customers to make reservations themselves.
* The system should be fast to support multiple users on the platform.

#### 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 needs a database to store all the customer’s information and reservations.
* The system should run on Linux because Linux provides better security, and it is cost-efficient to maintain the system.
* The application should be able to run on any web browser.
* The web application should be available on mobile devices.

#### 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 username and password need to be unique to distinguish between users.
* The password should be case-sensitive
* The system should notify the admin when several incorrect attempts to sign into their account.
* The admin should be notified when a user’s information is changed

#### Adaptability

*Can you make changes to the user (add/remove/modify) without changing the code? How will the system adapt to platform updates? What type of access does the IT admin need?*

* The IT admin should have the access to everything regarding the system.
* IT admin should have access to add users, change passwords, update roles
* The system should permit users to add/remove/ modify without changing the code by having POST requests, and controllers in the code.

#### 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 access the system everyone needs to log in with a username and password
* For a secure connection between the client and the server HTTP is needed.
* If brute force hacking is attempted, the admin should be alert immediately and shut down any access into the system
* The system should not allow more than 3 failed attempts into the system
* If a user forgets their password, they will be able to request a new password by going through the forgot password procedure.
* The system should alert the admin when the user request forgot a password

### 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 allow users to create an account
* The system shall allow the admin to assign roles within the company and automatically assign student roles to customers.
* The system shall allow password change if needed
* The system shall display test progression
* The system shall display packages available for users to purchase
* The system shall display user information after a successful login
* The system shall validate the user login

### 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.)?*

* User information
* Display driver instructor
* Home page
* Exam status
* Any notes left by instructors
* Available packages for purchase

### 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 should run concurrently to allow multiple users on the platform.
* The system should be available to access from any device that is connected to the internet.
* The system should run with little to no maintenance
* The interface should be user friendly
* Needs enough memory and storage to deal with all the user data
* Need payment processing
* Allowing refunds to customers

### 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?*

* Keeping up with the site maintenance, driverpass does not have a developer on its team.
* Initial client cost and storage cost
* Overlapping appointments for cars and instructor

### 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

Description automatically generated