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# 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 build a system for users to be able to practice for a driving test to better prepare themselves for the real test, as well as book on-the-road training sessions with a *DriverPass* employee.

### 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* believes there to be a void in the market of driver education and is looking to fill said void. The owner has stated that so many people fail their driving tests at the DMV, and *DriverPass* aims to better prepare users for both the written and on-the-road portions of the driving test.
* The components expected of the *DriverPass* system would be scheduling appointments, registering for online classes, and taking practice exams. Additionally, the administration wants to have the ability to track each reservation, full access over accounts, and a link with the DMV so they can maintain compliance with any updated policies.

### 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?*

* Customers will need to be able to create an account, including their name, address, phone number, email, and payment information
* Using their account, customers should be able to schedule classes, tests, or driving practice online. Users should also be able to re-schedule or cancel appointments, as well as reset their password
* Different role access for students and admin required. Admin needs ability to track customer reservations, track matches between users and drivers, and disable the purchase of packages.
* System needs to be linked with the DMV and receive notifications pending any updated policies
* The interface should display users online test progress and driver notes

## 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 customer has requested a web-based cloud platform
* The system should be reasonably responsive to ensure all features can be accessed efficiently
* The system should be updated as frequently as necessary, perhaps especially when the DMV issues an update

#### 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 run on multiple OS (Windows, macOS, Linux) as well as multiple different browsers.
* The back end needs a database to store information (cloud based)

#### 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?*

* Users should be required to have unique usernames and passwords to distinguish their account logins and include case-sensitivity
* Admin should be notified of problems as they occur

#### 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?*

* User changes should be taken care of in the back end without changing code
* The system will automatically adapt to platform updates
* IT needs access to the database to add/remove/modify users at any time

#### 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?*

* Username and password required for login, 2FA could be used for additional security
* A user should be temporarily locked out of their account after a certain amount of incorrect login attempts, and admin notified
* An option to reset password should notify admin and prompt a user to reset their 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 validate user credentials when logging in
* The system shall allow users to register, re-schedule, or cancel online classes and on-the-road training
* The system shall show packages for customers, and allow admin to disable packages as they become unavailable
* The system shall link with the DMV and receive notifications about any DMV updates to policies
* The system shall track all registrations and cancellations, as well as who is assigned to each driver and car for on-the-road training
* The system shall have a UI to display test progress, driver notes, account info, etc.

### 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 UI will be accessed with any device (mobile, PC, etc.) via an Internet browser
* Different users include customers and administrators
* Admin will require full access to ensure everything runs smoothly, as well as add/modify/remove users as needed
* Users will require access to make alterations to their own accounts and to interact with the non-admin features of the system

### 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 assumes users possess a device with Internet access
* The system assumes all users of each role are familiar with navigating the website

### 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?*

* Time limitations are depicted by the Gantt chart below, and while not referenced in the interview transcript (from what I could see), the owners of *DriverPass* almost assuredly have a budget – what they’re willing to pay for the product.
* *DriverPass* only has access to 10 vehicles at this time, so it will be important to not allow the vehicles to be over-booked. However, it would be best for this to remain scalable in the event that *DriverPass* expands their industry.

### 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 diagram with multiple colored squares

Description automatically generated with medium confidence