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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 goal of this project is to develop a more effective system that will enable students to receive training to assist other students in preparing for driving examinations. Liam is the representative of the client, and he is looking forward to the implementation of online training and practice examinations. In addition, Liam dreams of receiving assistance from the DriverPass team in the form of real-world instruction.
* DriverPass, the customer, intends to capitalize on a gap in the market by providing students with driving test preparation at their local department of motor vehicles (DMV).
* Liam, the proprietor of DriverPass, hopes to improve driving instruction by offering online courses, practice exams, and in-car instruction.

### 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 desires both online and offline access to the system. The team is worried that when it is down, the program won't be able to preserve any modifications. The team believes that the system's interface ought to be cloud-based. By doing this, progress should be saved offline. Only a specific number of employees should have access to this information, and security should be taken into consideration.
* Online appointment scheduling, cancellation, and modification is available to users.When registering, users must enter the following details: their address, phone number, state, credit card number, expiration date, and security code. Add the locations for pickup and drop-off.
* be able to reset a user's password automatically in case they forget it.
* Current modifications with the DMV. In order to receive updates for new guidelines, procedures, or model inquiries, DriverPass is linked to the DMV.
* cloud-based web interface.
* Online test progress is included in the web interface. displays the customer's current status and the accomplished tasks.

### 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?*

* After everything is finished, the system ought should display:
* Drivers' notes as well, any remarks left for the client to view, and the time taken for lessons.
* The system should be accessible offline.
* The customer will be able to see which driver is matched with a consumer, as well as the time and automobile.
* To do this, the system will comprise activities like maintaining current test, tracking, driving, timetables, etc.
* Customers will be able to select bundles through the system. The client requests the option to deactivate specific packages after they are reserved, based on the package that is selected.
* Exams will be administered to students online. It will display their development, what they have accomplished, and the tests they have finished. The progress will be presented in the following format:

1. Test Name
2. Take Taken
3. Score
4. Status

* The status can be displayed as failed, passed, in process, or not taken.

## 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?*

* To ensure that there are no flaws, security lapses, or updates needed for DMV guidelines, the system should be updated quite regularly. To guarantee that students are provided with accurate information about DriverPass, revisions pertaining to the DMV guidelines ought to be given top attention.
* For the system to be successful, it will be operated via the web.
* Given that the system makes queries that bounce back and forth between servers, it would require a high speed to function. Exams will be taken online by several students at once, so there will need to be some speed to keep things moving.

#### 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?*

* A browser such as Microsoft Edge, Chrome, or Explorer should be used to operate the system.
* In the event that a mobile device is employed to visit the website, it ought to have the capability to adjust its size to suit the screen.
* A database would be required for information storage on the back end.

#### 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?*

* To identify themselves, each user will have a password and user email.
* In order to aid with security, the inputs will be case sensitive.
* Once a user enters inaccurate information more than a specified number of times, the system will notify the administrator.

#### 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?*

* Actually, you ought to be able to modify things without having to alter the code. You would need to include controllers and POST requests in the code.
* The system will receive requests from the programmers and adjust to platform updates.
* The IT administrator will require access to everything, including user accounts and the removal of departing staff.

#### 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?*

* It would be necessary for the user to utilize their passwords and user emails.
* The connection or date exchange between the client and the server could be secured by using HTTP.
* After a certain number of unsuccessful attempts to log in, the administrator would be alerted if there was a brute force hacking effort. Two things will happen after four unsuccessful tries to log in:
* The system administrator will be notified.
* The user won't be able to enter their information because the log-in will close.
* A user has the option to reset their password if they forget it. Their email address will receive a password information from the system. The user can then change their password from there.

### 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 will verify and check the login data.
* The system must differentiate between log-ins from customers, employees, and administrators.
* Prior to preventing a user from accessing their account, the system will permit a predetermined number of login attempts.
* The technology will enable users to recover their usernames and reset their passwords.
* The system will validate the personal details of customers.
* The system will show the customer the bundles that are offered.
* The driver's notes will appear on the system.
* Any planned driving lessons or appointments will be displayed on the system.
* Customers will be able to choose and buy a package using the system.
* The technology will enable administrators to disable or remove complete packages.
* The DMV will be accessed via the system to obtain the most recent updates and modifications.

### 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.)?*

* A laptop, computer, mobile device, or any other device with an internet connection is required for the interface to function.
* The DriverPass developers and administrators use this interface in different ways. Both of them must be able to make modifications and/or upgrade the system as needed.
* It will be necessary for users to be able to schedule driving appointments, take online courses, and test.

### 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?*

* Everything, in my opinion, was taken care of in the design. There's everything users may possibly need.
* Users have the capability to create accounts.
* Users have the ability to log in.
* Users have the ability to create schedules.
* Users can monitor their advancement
* The only supposition I have is that the system doesn't have a budget. We are to presume that everything we are utilizing to develop the system will be included in the budget as there was no mention of one.

### 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?*

* I believe that a user's access to the internet will be restricted if they have a poor connection.
* Time and money are constraints as we have a deadline to meet and the client hasn't established a budget that we must follow.
* Changes in DMV guidelines can be a hindrance if the system is not correctly updated.
* The number of packets available and how many can be sold.

### 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.*

