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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 purpose of this project is to give inexperienced student drivers the information, training and practice needed to help on the driving tests. The client, DriverPass, requires the system to show information from the students, both incomplete and complete tasks, and any comments or notes from the in-car practice session. DriverPass would also like to include study material such as practice tests in the application.

### 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?*

* With DriverPass, the system is required to guide and assist student drivers for the road test as well as the online test. The problem facing drivers is that they are not passing the driving test on the first try. With this application, it will give a better chance for students to prepare by providing all the additional information needed for the students to study and pass the test. The login information for the students is required for the information to be accessed. The component list needed for this system includes a server, packages, and security. A server is needed due to data or information taken from the user progress then being stored. Packages are required due to them being utilized while the user is studying or practicing. Security is needed to securely let the user login to their account, by authenticating.

### 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 give student drivers tips, information, and training for student drivers to successfully complete the driver’s license exam or test. DriverPass requires the progress from the students to be tracked, along with contact information such as home address and email address. Payment information should be included as well. DriverPass requires the notes during the on-road test to be in the progress reports for each student. The system design should also include the ability to go through practice tests and grade them. It should also allow the students change information if needed. Accounts should be able to get removed or added by the administrator. When it comes to security, the system should authenticate the student login.

## 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 DriverPass system will be in a web-based environment due to the expansion for customers. The system should be able to accommodate its workload to sustain numerous customer accounts at a time, allowing the customers or students the ability to access the material. Administration will require to access the web-based system to make adjustments but will also need to access it in environments where there is no internet connection. The system can be updated by the administrator offline and online.

#### 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 platforms the system should run on include Apple and Windows. Utilizing the cloud, any tools such as databases will be provided to support the application. Client or customer information will be secured within the cloud when in use. Also, any storage required to run the application will be provided through the cloud.

#### 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?*

* Distinguishing between users will require an established unique ID or name. Registering the ID or name will ensure that it is not available for new users to use. When a new user is trying to assign a name that is already in use, it will alert the new user that the name or ID is taken and will request another input. The input is case-sensitive which will confirm any unique name is as specific as possible. Administration should be informed by the system of any issues regarding changes in user accounts or issues in the system; This allows for the optimization of the system.

#### 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?*

* Changes can be made to the user without changing code. IT admin will require full access to optimize the system such as updates or maintenance. The system will adopt to the platform updates by having a scheduled downtime then turning the system back online. Administration will require full access as well to modify, remove, or add changes to the user in the system. Changes can be made by logging in with the ID.

#### 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?*

* For each user to log in, a username or ID with a password will be required. Staff and customers will need to login with their credentials to access material in the DriverPass system. The connection or data exchange between the client and the server will be secured by utilizing the cloud online; as the client requested. By using the cloud online, it offers more security for the client and allows for the backup of information in the system. In the case of a hacking attempt, the client’s account should be reset, otherwise asking to reset the login password to ensure that the customer’s information is not accessed again. When a user forgets their login password, they can contact the staff and will be allowed to reset the password to set up a new 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 validate unique usernames or IDs
* The system shall include updated and current DMV regulations
* The system shall be accessible via laptop, desktops and mobile devices
* The system shall contain content to help the students practice and study such as tests or materials
* The system shall contain trainer notes or feedback for their driving report
* The system shall display the progress report for each student which will highlight their weaknesses and strengths
* The system shall allow students to schedule times when available
* The system shall allow for the addition, deletion and update of any customer accounts when needed
* The system shall notify users when updates are done
* The system shall have security measures to keep accounts secured
* The system shall display availability of trainers for driving practice
* The system shall display user profiles with pictures
* The system shall navigate easily for all users with a user-friendly layout
* The system shall operate both offline and online to administration as well as the product owner

### 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 interface should include information related to the profile of the user or account. The different users associated with the interface will be the staff and the students. The staff includes the trainers, administrations, or customer support. Students will need to check progress, access material to study, practice tests, or change profile information. Administration will need to create accounts, support users through appointments, and update the system. Security will need to access the system to test for optimization of the system and update small issues. The users will interact using web browsers and mobile.

### 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 assumptions made in the design that were not specified include the user’s ability to navigate around a computer. The user is assumed to know how to operate a computer. Also, the assumption that the user has a computer capable to run the application, with installed packages or updated software versions. The assumption that the user will utilize the application to improve their driving experience.

### 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 limitations for the system design include the development of the application on a computer, as it could require more tools for mobile devices. When there is a scheduled downtime, the users will not be able to access the application or system. With time limitations, budget and resources, the application will require updates to improve the design in future terms.

### 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.*

Table

Description automatically generated