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# CS 255 Business Requirements Document

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?*

* Create software that can set, modify and cancel in-person driving lesson appointments; that can administer online driving tests; and that keep and modify records of all its users. DriverPass will use this software to supply driving education.

### 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 an appointment system and database of users that can be accessed with role-based security privileges. The system will need a username/password log that can be authenticated per user and that can be modified by administrators including a user option to reset password. The system will also need an appointment log with associated appointment type and user information. Online driving tests must also be accessible. A complete report of appointments, driving tests and online tests should be populated available to download by administrative users. The system should get updates to employees of DriverPass when DMV policies change so that the DriverPass curriculum can be modified.

### 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 user should be able to log on using his/her password to take online tests, schedule in-person lessons and tests, and modify appointments for in-person lessons and tests. Administrative users should be able to log on likewise and access the information of the user to check, modify or create appointments. They should also be able to view a report of a user’s previous driving test including comments and score. Head staff receive automatic email updates for DMV policy change.

## 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 would likely run as a web-based application from a standard browser. Low latency is not necessary since no functions of the website will require quick response. The system should be updated as often as there are changes to DMV requirements or as needed.

#### 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 Windows, Mac, and all other common OS’s.

#### 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?*

* Different users can be distinguished by their usernames. The username should be only the customer’s email address. The system should be able to reset the password for each user by sending a reset link. It should inform the admin of a problem if

#### 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?*

* Users can change their own passwords or can change the email associated with their account but can only have one email address used as username per account. The IT admin will have access to the emails associated with each account and the ability to send a reset link upon request by the customer. The admin will also have access to logs of users time and events on the web app.

#### 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?*

* The email address will be the user’s username and they will have a password that they set when they create the account. For most applications, https and role-based access should be sufficient for online applications. If there is a “brute force” hacking attempt such as attempting a password three times incorrectly, the user will have to call the IT admin for a reset link requested by confirming personal info. If the user forgets their password, they can get an automatic reset link.

### 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 require email address entered first to check if the email address is listed in data.
* The system shall validate this address against the user-created password.
* The system shall log all activity associated with each user on the website accessible by the IT admin.

### 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 needs to be able to connect users to their personal info so that they can change it, to their activities such as online tests and setting up driving test appointments. The client wants the website accessible on desktop or mobile; this will be done via browser. The differences between mobile and desktop browsers need to be accounted for.

### 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?*

* We assume the users will have access to a valid email address. We assume the users will have access to relatively secure personal computers free of viruses.

### 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 project is limited to being accomplished by mid-May. Budget was not discussed in the interview\*\*. Technology is limited by budget. Resources are limited again by the client’s budget and by the company supplying the software having sufficient employees or time etc.

### 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 screenshot of a computer

Description automatically generated