CS 255 Business Requirements Document

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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?

* For training students in Driver Education
* DriverPass is the client
* Fill the void in the market
* Be able to take online classes and practice tests as well as 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?

* Access data from anywhere online and offline
* Admin roles for internal IT support
* Data Tracking for users (Activity report)
* Be able to reserve time for driving lessons (scheduling maker)
* Track user and instructor with time and car

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?

* Take online tests through the system
* Track progress through materials
* Schedule a driving test with the instructor (modify, add, cancel)
* Update DMV info as it changes
* User able to change password
* Admins can track user activity
* Able to download reports

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?

* This will be web-based
* Serverless
* Be able to handle many users
* Updated as needed or as the DMV laws change
* Updated per State rules

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?

* Should be able to run on all Platforms that has internet access
* Should be able to go to webpage and do everything needed
* Needs a database to store and pull information from

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?

* Make usernames based on emails to make them unique
* Require passwords to have Capital letters and numbers and special character
* System admin notified if someone has attempted too many password attempts
* Set password attempt limit to 15 so if exceeded there is a problem
* Notify admin if there are 80% capacity for users

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 should be able to edit their information which updates the database
* It Admin has full access to user info
* The system will use platform-specific conventions so design differences are minimally disruptive

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 user needs an email and password with requirements for length and complexity
* The user has 15 attempts to log in before being locked out and needs MFA to log in
* Use SSL and TLS to secure data exchange
* Users will be able to change their password with the email that was registered to the account

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.”

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 System shall have the company logo at the top
* The System shall have a window where it shows the user's progress through the materials provided
* The System shall show the user information
* A separate window for special needs
* A window with a driver's photo and a student's photo
* A window that shows drivers notes for students to review
* This will be mainly for Web Browser
* User will need to click on different aspects on the page to access

Assumptions

What things were not explicitly addressed in your design above? What assumptions are you making in your design about the users or the technology they have?

* They will have internet access
* Be able to type
* Be able to read

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 I see are budget
* Other limitation will be being able to update with DMV fast

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.

