Southern New Hampshire University

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CS 255 Business Requirements Document Template

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 the DriverPass project is to design and develop a comprehensive system that can help the client manage their drivers, vehicle information, students, training material, and course content.
- The client is a small business that operates a fleet of vehicles hoping to train students to become better drivers and pass the state driving tests.

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 their system to be able to schedule, track, and run reports on their customers to see who is utilizing the system and how they are doing.
- DriverPass wants to fix the problem of 65% of students failing the state driving test.
- The components needed include a user-interface, back-end database, and a secure connection between the client and server.

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 DriverPass system should be able to schedule, track, and report on the customers using their system.
- The DriverPass system should be able to offer customers with different driving packages based on their needs, and provide detailed login credential's to make ones user experience unique.
- The measurable tasks include user authentication, authorization, data validation, and the ability to generate 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.

- Certain nonfunctional requirements include performance, platform accuracy and precision, and security.

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 must be able to run on web-based and mobile platforms.
- The system should be updated and refreshed regularly to endure that it is up to date with the latest information about customers and drivers.

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 and Unix platforms.
- The system should be able to connect to a back-end database for storage and retrieval of the information.

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?

- The system should be able to distinguish between different users, and it should be case-sensitive in terms of input.
- All problems with the system should be reported to IT immediately.

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?

- The system should be designed in a way that allows the user to add, remove, or modify users without changing code.
- The system should have the ability to adapt to platform updates and allow the IT admin to access the system as needed.

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?

- To log into the system, the user must provide a valid username and password.

- The connection between the client and server should be secure, and data exchanges should be encrypted.
- In case of a “brute-force” hacking attempt, the system should lock the account and inform the admin.
- Passwords resets should have the ability to be reset by the user via email.

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 the user credentials while logging in.
- The system shall store and manage all relevant driver and vehicle information.
- The system shall generate reports and track trip information.
- The system shall provide a user-friendly interface for inputting and accessing the data.
- The system shall ensure data privacy and security.

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 DriverPass system must have a user-friendly interface that allows the different users to access and input the information they need.
- The interface should be accessible from both web-based and mobile platforms.
- The interface should allow different users to perform the tasks they need, such as inputting data, accessing information, and generating reports.

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?

- In the system design, assumptions are made about the users and their technology, such as the availability of a web-based or mobile platform to access the interface.

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 system will have limitations in data accuracy being that there is a lot of human inputted data required.
- Generated reports might have imperfections in the accuracy of the data.
- Being that DriverPass is a small business, we must keep the project under a set budget.

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.