Southern New Hampshire University

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 develop a system called DriverPass that assists users in preparing for their 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 aims to provide resources, mock tests, and scheduling features for those preparing for driving tests.
- The system seeks to address the lack of consolidated resources and tools available for driving test preparation.

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?

- Provide a comprehensive platform for driving test preparation.
- Allow users to schedule mock tests and track their progress.
- Ensure user data security and offer an intuitive interface.

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.

- The system should be user-friendly with an intuitive interface.
- It must offer data encryption to protect user data and test scores.

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 should be web-based to allow easy access from various devices.
- Updates should be rolled out at least once a quarter to ensure the latest driving regulations and resources are available.

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 primarily be designed for web access but have mobile responsiveness for smartphone and tablet use.
- A database is required to store user data, test scores, and other relevant 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 differentiate users based on unique user IDs or email addresses.
- Input fields, especially for test answers, should be case-insensitive.

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?

- Admins should be able to add, modify, or remove test questions without requiring code changes.
- Admins should have higher privileges in the system for content updates.

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?

- Users should authenticate via username and password.
- Secure SSL connections should be enforced.
- Accounts with multiple failed login attempts should be temporarily locked to prevent brute force attacks.

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."

- Users should be able to register, log in, and reset forgotten passwords.
- Users should access driving resources and mock tests.
- Progress tracking for users based on test scores.

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.)?

- Interface should be clean and minimalistic.
- Different user types: Students, Admins. Students primarily interact with resources and tests while Admins have content management capabilities.
- Mobile-responsive design for easy accessibility on various devices.

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?

- Users have basic computer literacy.
- All users have internet access.

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?

- Depending on budget, advanced features like AI-driven progress recommendations might be limited.
- Real-time syncing across multiple devices might not be immediate.

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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.