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?

- DriverPass has discovered that there are relatively few solutions available on the market to assist drivers in passing their driving tests.
- DriverPass had determined that they wanted us to assist them in developing a website that would give students the opportunity to online practice examinations as well as scheduling on-the-road instruction.

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 technology to assist in addressing and resolving the issue of individuals failing their driving tests.
- DriverPass intends to do this by offering online practice examinations, courses, and the opportunity to schedule on-the-road instruction through the system.
- The system should keep track of all reservations, cancellations, and changes, and provide three distinct on-the-road training packages to select from.
- In order to provide access to different users and the things they may accomplish with the system, the system needs also have adequate security mechanisms.
- If you have internet connectivity, the system should allow you to access data from anywhere.

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?

- We need to decide on an operating system and the languages we'll use to build the website.
- We should utilize object models, process models, and UML diagrams to aid in the creation of the system.

- In order to make adjustments if necessary or to further develop the system, the system should only allow specific access to specific personnel.
- Customers should be able to take practice exams and lessons online once the system is ready.
- When this system is finished, clients should be able to book, amend, and cancel on-the-road driver instruction through a fully working website.

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?
- Users should be able to visit the website without any issues if meaning the system needs to be fast enough to allow this.
- The system should be web-based, in the form of a cloud-based website.
- Any time the client decides to add new functionality, the system should be updated.

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 will manage all security through the cloud, which will also take care of the databases necessary for the back end.
- Linux should be used to operate the platform.
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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?
- Any difficulties, malfunctions, or faults with the website should be reported to the system promptly so that it may be fixed as soon as possible.
- When a user first visits the website, he or she should be able to establish a username and password. Case should be taken into account while entering data. Multi-factor authentication should also be included in the system to make it more difficult to hack into an account.

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 IT administrator will have full access to the system and will be able to make any required modifications or delete previous employees who no longer need access.
- As the demand for new functionality arises, the system will be gradually included into

platform upgrades. Platform upgrades will commence as soon as Driverpass decides to introduce new functionality to the website.
- You will be able to make changes to users and remove them from the system without having to change the code.

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?

- If a user forgets their password, they will be asked to enter the email address they used to create their account, and a link to reset their password will be given to that address.
- To prevent brute force assaults, the system should deactivate the account after four failed logins.
- The data interaction between the client and the server will be handled by the cloud.
- To log in, the user will need a username and password, as well as multi-factor authentication.

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 will display the tests and work that the user has accomplished so far.
- The system will grant customized access based on the user's privileges.
- The system must function quickly and efficiently.
- The system will provide three distinct driving packages
- The system will display the driver with whom the consumer has been partnered.
- The system will provide practice tests and classes for test prep.
- The system will be able to book reservations made by the user
- The system will require validation of user credentials in order to log 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.)?

- A mobile phone, laptop, computer, or any other device with an internet connection should be able to interact with the interface.
- Devs and Admin of DriverPass must be able to log in and make changes, as well as update the system as needed.
- Customers must be able to make bookings for driving appointment packages, as well as take online lessons and tests, using the interface.

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 design is assuming that users have access to desktop or mobile browsers and an internet connection. I feel like I covered pretty much everything that will be needed in order for users to make accounts, login, schedule, and track their progress.

- We were not given a budget for the system. Due to this we are making assumptions that all the stuff we are using to build the system will be in the budget. That includes using the Linux environment, and using the cloud.

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?

- I think two big limitations would be time and budget. This is a fairly robust app and even though we have all the resources to hit it successfully, sometimes certain features or parts of project can take longer than anticipated. Trying to build everything in on schedule and without going over the clients budget is something that needs to be planned from the beginning and regularly resisted during daily team meetings to ensure everything gets done.

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.