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 provide additional education resources for people who want to take a driving test. The client is the owner of DriverPass who has sent out to help people pass their driving tests. The client does want the system to be able to allow people to take online classes and practice tests as well as requests for 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?

- Driver pass wants to help people pass their driver tests by allowing people access to online classes and practice tests. They request the resources be accessible online and downloadable to be used offline for at home use. This would require an online server to store and change data as well as a system to parse the data into a file and download that from the server.

- DriverPass wants a security system that allows for differing levels of access where the owner can change account information to help people who lost passwords or block accounts if the person leaves the company. Like the client requests there will have 4 levels of access, one for the "big boss", one for an IT officer, one for the secretary, and lastly one for the users. This system will be intertwined with the tracking system that the client requests.

- Any reservation made by a user will be logged and able to be accessed and printed out. Reservations and changes made by the IT and secretary will also be tracked and recorded. Reservations can be made by a user through their profile, or an admin, like the big boss or secretary, can create one for a user.

- Identification systems also need to be used like a unique ID for each user.

- These reservations include a time and date for their driving lesson as well as the lesson they are taking. These lessons will have a choice from 3 packages in system that can be made adaptable to add or remove Packages. This has to be done through a developer until later.

- The reservations will include first name, last name, address, phone number, state, and their credit card number, expiration date, and security code. This can be done with a custom structure or class make up with these properties.

- Connection with the DMV is important. A way to quickly parse and access tests from the DMV for users to access would help keep the system updated.

- Interface needs to include information editing area and contact page to get in touch with the client.

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?

- When completed the system need to be able to hold a unique ID for each user which holds the security passwords to access their accounts and allows them or the Admins to change information or create reservations. This can be done through a class with properties to hold the information and methods to edit and get all the information.

- The Lesson choices would be in a list that allows for the original three to be put in and then added to or taken from by a developer. The lessons can be created in a class to allow property changes and adaptions.

- Every change made by the users or admins can be logged on the user profile where only admins can see or print out the logs. Admins should also have direct access to changing user passwords while users have to have a more complex way to change a password like and request through their email.

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 needs to run on a web based server that can update anytime the users have access to the internet. The system needs to run quickly so updates to peoples schedules can be logged asap. Having an application people can access easily on their devices would make the process streamlined if the application also holds the users login information.

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 backend will require a database to store users information as well as online copies of the scheduling for both the users and DriverPass. Running this on Linux server would be the cheapest way and allow the fastest processing but would require work to secure the system. An API to access the available tests from DMV database quickly and effectively.

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?

- Since the admins will have access to logs of the changes made having a system that categorizes the logs and sends the admins a notification if a problem is shown will be helpful to DriverPass. The users and admin will need to login with a username and password. Making the pass have to be at least 6 characters long with a capital and special character will force the user to come up with something stronger. A recovery system will be put in place where a user can send an email to an email confirmed with the account to make a new password if they forgot their current one. Admins will need a code sent to another device of theirs to log into their accounts to further the security.

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 edit their profile setting without changing code through input areas. Admins can add and remove the deals that appear on their home page and create new ones without the need for code changes. An IT admin to help DriverPass learn the system, answer questions about the system, and be a communicator between DriverPass and us would need some access to the program and a developer version so they can find and test problems to report on.

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?

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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 encrypt a users data before it is stored in the server.
- The system shall allow users to pick and choose different DriverPass created plans to pay for.
- The system shall display the users information in their profile in a neat and organized way that's easy to digest.

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 users need to see their information in an organized and easy to digest way while also having the option to change information at will. Changing a password or username will require and email sent to a confirmed email on the profile.
- Users also need to have a store page access to make purchases on the offered plans.
- Admins will see a different kind of interface where they can search and access the profiles of different users with the ability to make and schedule driving lessons for them.
- Admins will have access to the store but instead of making purchases they can add or remove the current available plans.

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 may not have constant access to the internet so data can only be updated with a internet connection.
- Users can use any device, making the system efficient and fast will allow it to run on even older devices.

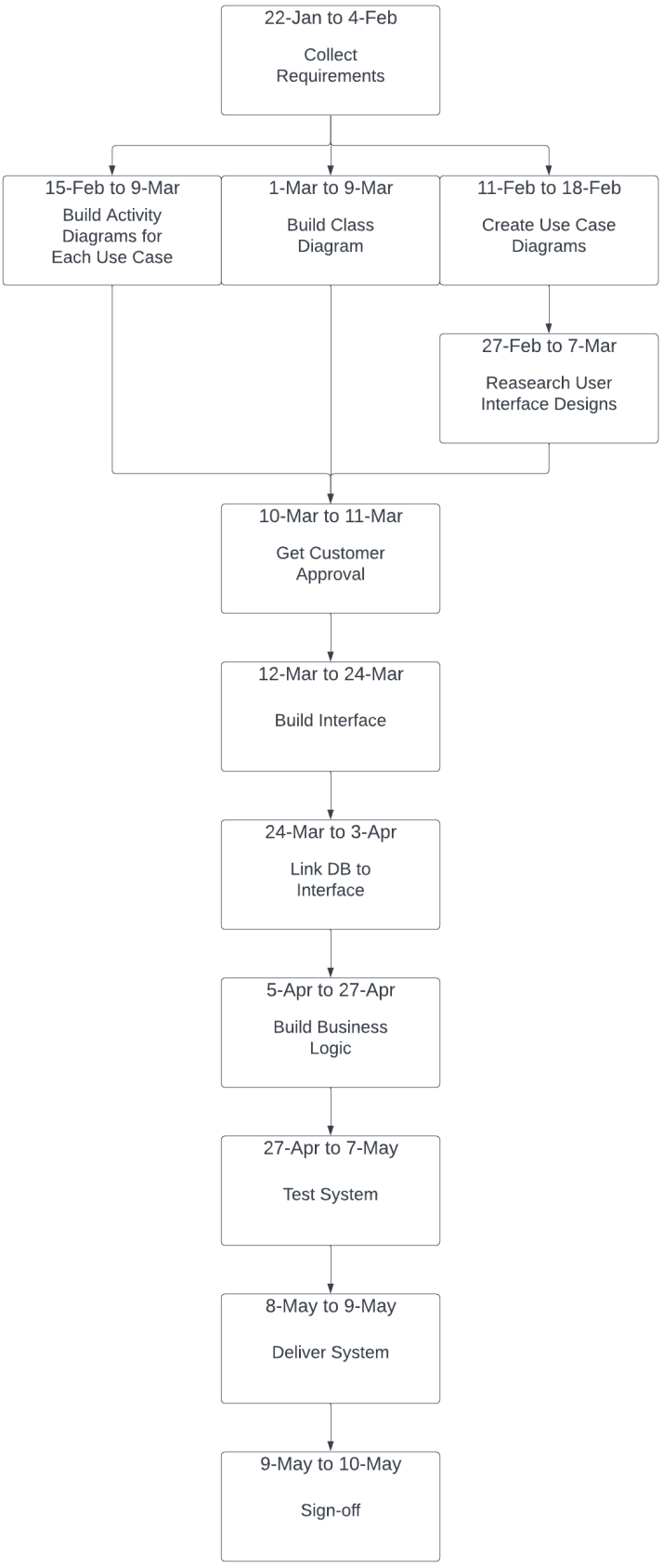
Limitations

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?

- Time, we have planned to be done with most programming parts in less than 2 months and there is plenty planned ahead. We may be removing some feature to allow it to be done on time.

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.


22-Jan to 4-Feb
Collect Requirements
15-Feb to 9-Mar
Build Activity Diagrams for Each Use Case
1-Mar to 9-Mar
Build Class Diagram
11-Feb to 18-Feb
Create Use Case Diagrams
27-Feb to 7-Mar
Reasearch User Interface Designs
10-Mar to 11-Mar
Get Customer Approval
12-Mar to 24-Mar
Build Interface
24-Mar to 3-Apr
Link DB to Interface
5-Apr to 27-Apr
Build Business Logic
27-Apr to 7-May
Test System
8-May to 9-May
Deliver System
9-May to 10-May
Sign-off