Southern New Hampshire University

CS 255 Business Requirements Document Template

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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?

- The purpose of this project is to develop a website for the company DriverPass that allows them to take their classes to a virtual setting. They would like for the program to be able to handle students taking practice tests, schedule driving hours, and sign up for practice courses. DriverPass came up with this idea when they realized that there was a market need for third party training before people went to the DMV for their actual driving tests and with the packages being offered they are looking to fill that gap.

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 has a couple different features that they would like to include in their online program, first they want to create user registration so they can keep track of who is using the website and the progress they've made. Another feature they are keen on is online courses that will help teach users the basics and important details of driving. Practice tests also are a very big part of their vision, and finally they want to add a reservation system to reserve in person driving hours. DriverPass needs their system to be able to hold all user information and then apply it the training process so it can be tracked. The problem they were trying to solve by creating this program was finding a way to give drivers extra practice before they begin their journey to take the DMV test.

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?

- It is imperative that this system can handle the user's input and then store the information about their driving record, practice tests and other lessons or driving courses they have signed

up for. The system ideally should be able to confirm the sign up form, allow students to register for various courses and record practice test results and driving records.

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?

- In order for this system to run it will need to use a web-based site that can be accessed both with a mobile device or a computer. The quicker this system can perform its tasks the better, because students and instructors will constantly be inserting information and trying to manage the driving schedule. The system should also be updated consistently to keep up with possible new courses that are being offered and new users that are just getting into the system.

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?

- DriverPass has stated that they would like their program to be a cloud based system that runs on a web-based site and uses a database to store and manage information such as courses, student data, available lesson times and administrative data for the employees of DriverPass itself.

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?

- While our client did not provide a requirement for a differentiation of users, they did ask to make sure that admin accounts were included for the specific people who need them such as the IT officer, The head of the company, and the secretary in order to update and keep track of the driving schedule when user's call in to schedule their hours. Ideally our system should notify the admins when a new driving reservation is made or there is an error in the system.

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?

- With this program we are going to incorporate a form editor in order to manage our users, this will connect to our database and then using CRUD operations we can edit our information without having to interfere with ant code. Our system will adapt to updates by updating the

database each time there is a new request. Our admin IT user should be able to access the read and write functions in order to access the site and our database. Anything past that should be left to the developers.

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?

- In order to maintain system security users will have to register with their name, email, phone number, password and then payment information. In order to log in users will be asked to provide their name and password they have registered with. Two factor authentication should also be heavily considered seeing it will enhance the security of the system immensely and deny any brute force hacking attempts. If a password needs to be reset the IT admin has access to make the change and then email a new password to the user.

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 let users update and create passwords.
- The system shall let users edit and cancel their driving appointments.
- The system shall let users choose from the three packages offered and register.
- The system shall let users record their test scores and take their tests.
- The system shall allow admins to edit or delete packages and courses that may be unwanted.
- The system shall allow users to update their profiles and notify then when they have completed courses.
- The system shall allow admins to block, restrict or delete users as a whole.

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 needs of this interface include a user log in page that doubles as a user registration page.
- A home page that contains current courses, practice tests, profile picture, notes and a company logo.
- An online portal that will allow users to access their practice tests and important course materials.
- A page for reservations and the creation of new driving hours.
- A student info page that displays their progression and all contact information.
- A contact page for DriverPass that allows the user to get a hold of the company.
- All interfaces will be purely web based with no applications being made available.
- Mobile interface will have to be scaled down in order to be suitable for use.

- Admin users must be able to view all current users and have the ability to modify and delete users.
- Admin users must be able to view all current courses, practice tests and lessons and add new functions when necessary.
- View where the secretary can edit current appointments.
- View for the IT admin user so he can reset the passwords.

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 first assumption that is being made about this program is that users will be able to access the internet at all times of the day, since it is purely web based users must always have internet access.
- Another assumption is that users will have the proper technology necessary in order to use this program, not everyone has the best new phone or computer.
- The company should look into making a mobile or desktop application as a lot of users would prefer it to be easily accessible instead of having to go to a web page every time.
- One more assumption is that the database will constantly be updated, and the site will consistently have the newest possible information displayed.

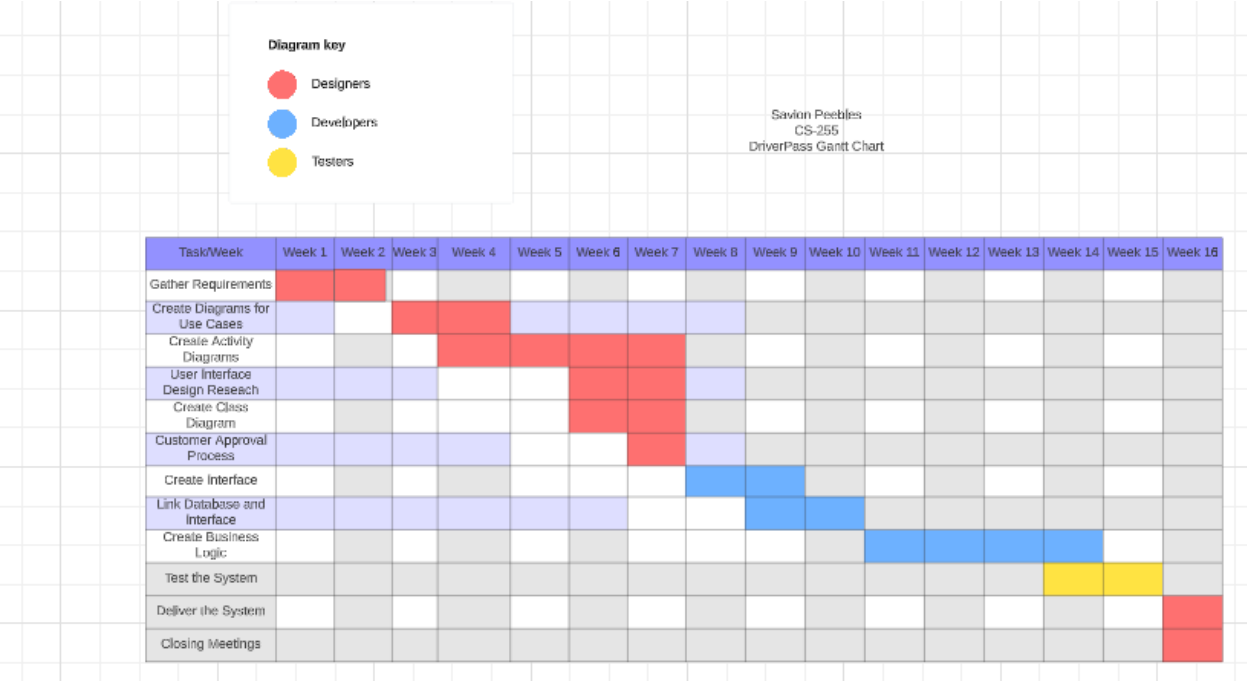
Limitations

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?

- As stated above the program is extremely reliant on the user having internet access at all times because there is no offline version available.
- As new features are added, and new courses appear, it provides the opportunity for more bugs to arise and change how the program performs as a whole.
- Since our development team is smaller than typical it could cause a longer development timeline when it comes to new features and addressing bugs.
- Cloud-based storage costs are reliant on the amount of data you are storing so if we are handling a larger amount of data than expected it will lead to higher costs for our cloud system.
- Consistently updating our DMV section with the latest laws and regulations may be delayed due to resources being presented in an inconvenient manner.

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.



Task/Week	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16
Gather Requirements																
Create Diagrams for Use Cases																
Create Activity Diagrams																
User Interface Design Reseach																
Create Class Diagram																
Customer Approval Process																
Create Interface																
Link Database and Interface																
Create Business Logic																
Test the System																
Deliver the System																
Closing Meetings																