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 project's goal is to build a system that helps people prepare for their DMV driving test.

- DriverPass wants customers to take online classes, schedule driving lessons, and track their progress.
- Staff members need tools to manage appointments, handle account issues, and view reports.
- Overall, the system should make training easier for customers and daily tasks smoother for employees.

### 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 to solve the problem of people failing their DMV tests by offering better training.
- The system needs to support online classes, practice tests, and in-person driving lessons.
- Key components include customer accounts, scheduling tools, driver and car assignments, and progress tracking.
- The system also needs security features, reporting tools, and a way to receive updates from the DMV.

### 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?*

- Customers should be able to register, choose a package, schedule lessons, and take online tests.
- Staff should be able to update customer information, manage appointments, and reset passwords.
- The system must validate logins, store customer data, match drivers and cars to lessons, and track changes.
- It should also receive DMV updates and keep training materials current.

## 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 as a cloud-based web application.
- It should load quickly and handle many users at once.
- Updates should happen regularly, especially when the DMV sends new information.
- Users should be able to access the system from anywhere with internet.

### 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 common platforms like Windows and mobile browsers.
- It requires a cloud server and a database to store customer data and appointments.
- The back end needs tools that support secure storage and user authentication.

### 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?*

- Users are identified by unique accounts and login credentials.
- Login information should be case-sensitive for security.
- The system should alert the admin about unusual activity, like repeated failed logins.
- It must clearly track who made changes to appointments or customer records.

### 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?*

- Staff should be able to add, remove, or modify users without changing the code.
- The system should continue working even when browsers or platforms update.
- The IT admin needs full access to manage accounts and block users if needed.
- The system should be flexible enough to add new features later

**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 must log in with a username and password.
- All communication between the user and server should be encrypted.
- Accounts should lock temporarily after too many failed login attempts.
- Users should be able to reset their passwords automatically if they forget them.

## 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 allow customers to create an account.
- The system shall validate user credentials when logging in.
- The system shall let customers schedule, cancel, and modify lessons.
- The system shall match each lesson with a specific driver and car.
- The system shall track who created or changed any appointment.
- The system shall store customer information securely.
- The system shall provide online classes and practice tests.
- The system shall update test questions when the DMV sends new material.
- The system shall allow staff to manage user accounts and reset passwords.
- The system shall generate activity reports for the owner.

## 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 interface should be simple and easy for customers and staff to use.
- Customers need tools to register, schedule lessons, take tests, and view progress.

- Staff need tools to book appointments, update customer information, and view schedules.
- The owner and IT officer need access to reports and account management tools.
- The interface should work on computers and mobile devices through a web browser.

## 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?*

- Customers will have internet access and a device that can use the web system.

- The DMV will send updates in a usable format.
- Staff will be trained to use the system and understand their access levels.
- Customers will provide accurate personal and payment information during registration.

## 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?*

- Some features, like fully customizable packages, will not be included in the first version.
- Users can only update data while online to avoid duplicate or outdated information.
- The system depends on the DMV sending updates, which DriverPass cannot control.
- Time, budget, and staffing may limit how many features can be built right away.

## 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.*