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?

- DriverPass aims to provide better driver training to help students pass their driving tests at the DMV.
- The system will offer online classes, practice tests, and on-the-road training scheduling.
- The purpose is to create a comprehensive system that handles all aspects of DriverPass's business operations.

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 address the high failure rate of driving tests at the DMV.
- The system needs to provide access to online classes, practice tests, and scheduling for on-the-road training.
- Key components include user account management, online learning platform, scheduling system, and reporting tools.

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 users with access to online classes and practice tests.
- Allow users to schedule, modify, and cancel on-the-road training appointments.

- Manage different training packages and user accounts.
- Generate reports on user activity and progress.
- Maintain up-to-date information in compliance with DMV regulations.
- Ensure secure access to user data and system functions.

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 should be accessible online from any computer or mobile device.
- Data should be available for offline viewing (e.g., downloadable reports for Excel).
- The system should be updated regularly to maintain compliance with DMV regulations.

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 be web-based, preferably cloud-hosted.
- A database backend will be required to store user information, schedules, and test results.
- The system should be compatible with common web browsers and mobile devices.

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 must accurately track user progress in online classes and practice tests.
- Appointment scheduling must be precise to avoid conflicts and ensure proper resource allocation (cars and instructors).
- User input for personal information and test answers must be validated for accuracy.

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 system should allow for future modifications of training packages without requiring major code changes.
- It should be able to accommodate updates to DMV rules and regulations.
- The IT admin should have the ability to modify user roles and access rights.

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?

- User authentication required for accessing personal information and scheduling.
- Secure connection (HTTPS) for data exchange between client and server.
- Automatic password reset functionality for users who forget their passwords.
- Role-based access control to limit system access based on user type (e.g., admin, secretary, customer).

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 users to create and manage their accounts.
- The system shall provide access to online classes and practice tests.
- The system shall allow users to schedule, modify, and cancel driving lessons.
- The system shall track and display user progress in online classes and practice tests.
- The system shall generate reports on user activity and reservations.
- The system shall allow administrators to manage user accounts and access rights.
- The system shall provide different interfaces for customers, employees, and administrators.
- The system shall integrate with DMV updates for current rules and regulations.
- The system shall process and store customer payment information securely.
- The system shall allow administrators to enable or disable training packages.

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 system will be web-based, accessible through common web browsers.
- The interface will include sections for user information, online test progress, driver notes, and special needs.
- Separate interfaces will be designed for customers, secretaries, and administrators.
- The interface should be responsive and mobile-friendly.
- Clear navigation and intuitive design for ease of use across all user types.

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 access to internet-connected devices to access the system.
- DriverPass will maintain a fleet of cars and employ driving instructors for on-the-road training.
- The DMV will provide regular updates on rules and regulations.
- Users are comfortable with basic web navigation and online account management.

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?

- The system cannot automatically update DMV rules without admin oversight.
- On-road training is limited by the number of available cars and instructors.
- The system's availability depends on internet connectivity and cloud service uptime.
- Custom modifications to training packages will require developer intervention.

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	JAN	FEB	MAR	APR	MAY
STAGE 1	COLECTING REQUIREMENTS		JAN 22 - FEB 4			
	CREATE USE CASE DIAGRAMS		FEB 11 - FEB 18			
	BUILD ACTIVITY DIAGRAMS		FEB 15 - MAR 9			
STAGE 2	RESEARCH UI DESIGNS			FEB 27 - MAR 7		
	BUILD CLASS DIAGRAMS			MAR 1 - MAR 9		
	GET CUSTOMER APPROVALS			MAR 10 - MAR 11		
STAGE 3	BUILD INTERFACE			MAR 12 - MAR 24		
	LINK DB TO INTERFACE			MAR 24 - APR 3		
	BUILD BUSINESS LOGIC				APR 5 - APR 27	
STAGE 4	TEST SYSTEM				APR 27 - MAY 7	
	DELIVER SYSTEM					MAY 8 - MAY 9
	SIGN-OFF MEETING					MAY 9 - MAY 10