Ryan Zackus

10-28-2023

# 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 client DriverPass wants a program that is used for driver training.
* The system should have online training courses.
* Be able to schedule in person driver training with specifics like date and time.
* Hold driver information that stays in compliance with DMV rules.
* Track drivers progress
* Make communication easy between customers and client.
* The system should be very user friendly.
* Display the different packages offered for driver training.
* Can be easily modified in the future to add or remove packages.

### 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?*

* Easy to use UI that drivers can use to track their progress and check appointments.
* A secure database for all client and customer information.
* A logging system to record drivers progress
* Easy to use reservation system for driver appointments.
* A way to connect to the DMV for recent law changes.

### 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?*

* Allow different accounts to be made for admins, instructors and drivers.
* System to manage online driver training, showing the different training packages offered.
* Offer on the road training sessions.
* Have a secure framework using encryption, defined user access, and secure payments.
* Monitor and record user logs.
* Easy customer communication with the client, like notifications and contact information.

## 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 web-based with fluent operations.
* Minimal loading time.
* Scheduled updates monthly or as needed for maintenance as well as functional updates to make improvements in the future.

#### 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?*

* Compatibility with Windows and MacOs.
* Designed to easily scale up for increased user count.
* Fully optimized to limit bandwidth.
* Minimal downtime for maintenance and updates.

#### 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?*

* Customer created usernames.
* Case-sensitive password input.
* Alerts for the admins in case of system faults or other issues.

#### 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?*

* Ability to add, edit, or remove admin and user accounts.
* Capable of updating changes in driving requirements or new laws passed.
* UI screen adaptation, the UI should be intuitive across all screen sizes and platforms.
* IT administrator needs full system access.

#### 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?*

* Multi-factor authentication.
* Encrypted user data.
* Accounts locking after 3 attempts.
* Account recovery options.

### 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 validate user credentials when logging in.
* The system shall provide different levels of access for drivers, employees, and admins.
* The system shall provide direct communication between users and employees.
* The system shall be secure in processing and storing user`s data.
* The system shall display the available driving 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.)?*

* Full cross compatibility for different platforms, PC Mac, and mobile.
* Ability to access user`s course options and progress.
* Ability for the user to schedule appointments and contact employees.
* UI is accessed through 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?*

* Users have basic knowledge of computers and how to use basic websites.
* Users have internet access.
* The client has the means to maintain the program.

### 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 timeline is January 22nd to May 10th.
* The program will depend on third-party services like DMV connectivity.
* Keeping the program updated to DMV rules and regulations.
* Being reliant on a Cloud server could affect the performance.

### 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.*

