

## 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 is the client
- System will be used internally by the company and also externally by users
- Wants to be able to access company data online from various devices
- Wants to allow customers to create and schedule lessons in various ways
- Wants to be up to date with current DMV information
- Wants customers to be able to view their progress in courses

#### 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?*

- Wants to fill a hole in the market
- Provide better driver training
- Online teaching and exams
- Offline on-the-road training as well
- Client does not have their own hosting infrastructure

#### 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?*

- Be able to view and download online data from various devices
- Implement access control for security, password resets, access revoking
- Keep records of reservations, including who made, modified, or canceled it
- Should also be able to print out reservation records
- Allow reservation to be modified via online account, phone calls, or in person at office

- Keep track of date and time of reservation, and also the driver and car that are reserved
- User can reserve 3 different packages with different levels of time with a driver, in person lessons, and online lessons
- More than 2 hours with a driver requires multiple sessions scheduled
- Allow for packages to be discontinued easily without a developer
- Keep track of customer name/address/phone number/credit card info, and also pick up and drop off locations
- Provide notifications on updated DMV policies
- Show students course progress
- Keep track of time taken, score, and status (in progress, failed, or passed) of tests
- Show students scheduled lessons, including start and end times
- Allow drivers to comment on students previous lessons
- Contact page
- Input form for customer data (usable by both secretary or customer)

## 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?*

- Should run in a browser
- Be able to run on low power devices
- Should be updated frequently to meet modern standards

### 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?*

- Should run on all OSes with modern browsers (Windows, MacOS, Linux, Android, iOS)
- Will require a database for student information and progress
- Will require a database for appointments

### 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?*

- Used by students
- Used by administrators
- Used by secretaries
- Admins should be informed of all changes for documentation purposes

### **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?*

- End users should be able to modify/add/remove appointments without coding
- Should be able to easily change and update lessons to modern standards
- IT will need remote access, probably through a web interface with tools provided to them

### **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?*

- All accounts secured with username and password
- HTTPS encryption
- Users should be able to reset passwords without IT intervention
- There should be a 10 second delay between login attempts and up to 5 tries before the account is temporarily locked out

### **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 a dashboard to view student progress
- The system shall provide means to update passwords without IT
- The system shall use HTTPS encryption
- The system shall allow reservations to be created, modified, and canceled
- The system shall allow remote access to needed data

### **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.)?*

- Students must be able to view course progress
- Students must be able to make, view, and edit appointments
- Students must be able to update password
- Secretary must be able to make, view, and edit appointments
- Sites design must work for both desktop and mobile

### **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
- Users have access to a device powerful enough to run the software

### 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?

- Low data usage
- 4 months to complete project
- Hosting must be provided

### 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.

