**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 purpose of this project is to build an online system for DriverPass, a company that wants to help people pass their DMV driving tests with better training.
* DriverPass wants students to access online classes, practice tests, and book in-person driving lessons easily.
* The system must be accessible on computers and mobile devices to reach a larger audience.
* It should keep all customer data secure and private.
* DriverPass’ staff should be able to manage scheduling, view reports, and update customer information remotely.

**System Background**

*What does DriverPass want the system to do?*

* The system should fix the problem of high failure rates by providing students with better training tools and resources.
* It should also give students 24/7 access to courses, quizzes, and practice tests from anywhere.
* It should allow students to easily book and reschedule driving lessons online.
* It should have secure user accounts for students with appropriate permission levels.

*What is the problem they want to fix?*

* Too many students fail the DMV driving test because they don’t have enough practice or good-quality study material.
* The current booking and scheduling system is not efficient or user-friendly.

*What are the different components needed for this system?*

* Online learning modules (videos, quizzes, practice tests)
* A booking and scheduling module for driving lessons
* A secure login system for students and staff
* A user management dashboard for staff roles (owner, IT officer, secretary)
* Reporting tools to track student progress and staff activity
* Cloud-based data storage for backups and security
* Integration with DMV updates to keep training materials current

**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?*

* The system should let students register, pick training packages, and manage their bookings online.
* It should allow students to check their progress and test scores anytime.
* The system should give secretaries the ability to update student records, answer booking calls, and handle scheduling changes.
* It should allow the owner and IT officer to oversee the whole system, including user permissions and access control.
* It will make it easy for staff to block or unblock accounts and remove outdated training packages.
* It will clearly log who makes changes or bookings in the system.
* It will automatically generate reports on student activity, bookings, and overall performance.
* It will keep the system updated with the latest DMV changes.
* It should be user-friendly, secure, and flexible for future upgrades or new training packages.

## 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 will be web-based and accessible on PC and mobile devices
* Web pages should load quickly
* The system should be available 99.9% of the time with minimal downtime
* Any system updates should happen during off-hours
* Reports should have quick download time

#### 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 run in the cloud, eliminating the need for physical servers
* Users can access it through web browsers across all major operating systems (Windows, Mac, iOS, and Android)
* The back end will need a database
* Admin tools and everything else should also be usable through the web browser

#### 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?*

* Every user will have a unique login credential, passwords will be case-sensitive
* Some inputs will be validated to accept only certain formats, like credit card information
* Usual activity (like several failed login attempts) should inform an admin
* Admins should also be made aware of any updates and system failures

#### 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?*

* Admins should be able to manage user accounts through the system without changing code
* IT admins will have full access to manage users, system logs, and other behind-the-scenes aspects of the system
* The system will allow for the enabling or disabling of packages that the students have purchased
* The system should be flexible; modular development will allow for easy scalability

#### 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?*

* Logging in will require a username/email and password
* All data will be sent securely using HTTPS
* If someone types a wrong password too many times, the system will lock them out
* If a user forgets their password, they can reset it by getting a secure email link
* Passwords will be stored using encryption and hashing

### 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 students to register online with their personal and payment info
* The system shall let students pick a training package when they sign up.
* The system shall let students and staff schedule, change, or cancel driving lessons
* The system shall assign drivers and cars to scheduled lessons
* The system shall let drivers leave notes and log lesson times
* The system shall allow students to take practice tests online
* The system shall show students their test progress
* The system shall generate reports for admins
* The system shall support different roles with permissions based on role
* The system shall let users reset their passwords
* The system shall notify staff when DMV updates are received
* The system shall allow admins to turn training packages on or off

**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 needs to be clean, simple, and easy to use from any device
* It should all work in a browser with no need for app downloads or special software
* Different users need different things:
  + - Students: Register, book lessons, take tests, view scores.
    - Secretary: Make or change bookings for students, enter their info.
    - Drivers: Add lesson details and notes.
    - Admins/IT: Access everything, manage users and packages.

### 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 connection to the internet
* Users’ web browsers are up-to-date
* Payment processing will be handled by a third-party
* The DMV will provide an easy and efficient way to send updates

### 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?*

* Customizing training packages beyond turning them on or off will be beyond the scope of admins and will require code change
* Functionality depends on the reliability of the cloud provider and third-party tools
* If the DMV system doesn’t provide updates in a usable way, integration will be tricky
* This iteration of the system will only include features discussed in the interview; Extra features will have to be made at a later time
* Testing time is only 10 days, limiting the amount of time the developers have to make changes based on new requests that may arise

### 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.*

A gantt chart with a graph

AI-generated content may be incorrect.