# 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, a company focused on driver training, has hired our team to develop a system that provides online practice exams and on-the-road training options.

### The system will offer DriverPass users convenient features such as online reservations, account management, and progress tracking.

### The system will include staff tools for handling reservations, monitoring user activity, and managing account permissions to ensure smooth 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 help individuals prepare for and pass their DMV driving tests by providing better training resources and tools.

### The system should support the following functions:

### User account creation and management

### Scheduling, modifying, and canceling driving lessons both online and through staff assistance

### Managing various training packages to meet user needs

### Ensuring data security for user information and lesson activity tracking

### System integration to stay updated with DMV requirements

### Key components of the system:

### Cloud-based access to support easy user interactions

### Reservation and data tracking systems for managing lessons and user data

### Secure administrative tools for managing accounts, permissions, and activity

### 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?*

## User Features:

## Access to online practice exams, view scores, and track progress over time.

## Ability to schedule, modify, and cancel driving lessons both online and with staff assistance.

## Staff Features:

## Tools to manage reservations, user accounts, and ensure system security.

## Activity tracking for users to enable detailed reporting and accountability.

## System Integration:

## Integration with DMV updates to ensure training material is up-to-date.

## Secure cloud-based storage for customer and reservation data, enabling easy backups and quick access.

## 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 must run as a web-based application, accessible on both desktop and mobile devices.
* The system should load all pages and respond to user actions within 2 seconds under normal usage conditions.
* System updates must occur biweekly or immediately in response to DMV requirement changes.

#### 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 must operate on Windows and macOS, with compatibility for common web browsers Chrome, Firefox, and Safari.
* The back end will use a secure relational database, such as MySQL to store user and lesson data.
* A cloud-based infrastructure will support scalability and minimize downtime.

#### 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 will log in with unique credentials (username and password). Input will be case-sensitive.
* Admins will be informed of errors or issues, such as failed logins or data inconsistencies, through automated notifications.

#### 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 can add, remove, or modify users, lessons, and training packages through an admin interface without requiring code changes.
* The system will automatically adjust to browser and platform updates to maintain compatibility.
* IT admins will have full access to manage permissions, packages, and data.

#### 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 login requires a strong password. Multi-factor authentication can be implemented as an additional layer.
* All data exchanges between clients and servers will be encrypted using HTTPS.
* Accounts will lock temporarily after multiple failed login attempts. Password reset options will be securely handled via email verification.

### 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 upon login.
* The system shall allow users to schedule, modify, and cancel lessons online.
* The system shall log user actions, such as reservations or cancellations, for auditing purposes.
* The system shall provide downloadable progress reports.
* The system shall integrate with DMV updates to ensure current practice materials.

### 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.)?*

* Admin users will have access to dashboards for managing accounts, lessons, and tracking progress.
* Secretaries will manage appointments and interact with the system via an intuitive scheduling module.
* Customers will use a web-based interface to schedule lessons, view progress, and take practice tests.
* The interface will support mobile and browser-based interactions.

### 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?*

* It is assumed users will have internet access and a basic understanding of web applications.
* The DMV will provide updates in a compatible format for integration with the system.
* The design assumes a standard level of browser support.

### 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 initial version of the system will not include real time communication features
* Budget constraints may limit the integration of advanced DMV API functionalities.
* Development timelines are dependent on uninterrupted resource availability.

### 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 chart with blue rectangles

Description automatically generated