# CS 255 Business Requirements Document Susan Lopez

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?*

* Create a system for DrivePass that provides a better driving test preparation experience for customers
* The client, DrivePass, wants a system to enable online classes, practice tests, and scheduling for on-the-road driving lessons

### 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?*

* Address high failure rate of DMV driving tests by offering comprehensive training options
* The system needs to support:
  + Online classes and practice tests
  + Scheduling and managing driving lessons
  + Access to progress reports and activity logs
  + Different user roles and permissions
* Problem to fix: lack of a centralized, flexible system for these services

### 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?*

* Enable online scheduling of driving lessons
* Allow users to access practice tests and track progress
* Provide data access across multiple devices (online and offline)
* Maintain security with role-based access and activity tracking
* Be flexible for package modifications and future updates

## 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?*

* Web-based and cloud-hosted
* Operate across multiple devices, desktops and mobile devices
* Reports and online classes should load within 2 seconds
* The system must be updated quarterly or as needed to maintain DMV compliance

#### 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?*

* Windows
* macOS
* iOS
* Android
* Backend will require a secure database system for data storage

#### 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?*

* User accounts will require unique identifiers
* System should validate input fields
* Admin notifications will trigger for invalid login attempts or system errors

#### 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 must have options to enable/disable packages and user accounts without coding
* The system shall integrate smoothly with platform updates to maintain compatibility
* IT admins will need access to back-end settings for maintenance and troubleshooting

#### 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?*

* Users will log in with unique credentials; passwords must be strong and hashed
* Connections between client and server will use SSL encryption
* Lock accounts temporarily after 3 failed login attempts
* Provide a password reset option with multi-factor authentication

### 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.”*

* Allow customers to schedule, modify, and cancel driving lessons
* Track and log user actions
* Allow admins to reset passwords and block accounts
* Notify users of DMV updates and compliance changes
* Display lesson schedules, progress, and test statuses

### 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.)?*

* Users: admins, secretaries, instructors, and customers
* Customers: Schedule lessons, view test progress, and reset passwords
* Secretaries: manage schedules and appointments through web based dashboard
* Admins: manage user roles, security, and system settings
* Interfaces will be optimized for both desktop and mobile devices

### 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?*

* User have access to modern devices and reliable internet
* Cloud-hosted system includes regular backups and third party security services
* The client’s IT team will handle minor system 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?*

* Initial design does not support non-developers being able to modify characteristics
* Budget constraints may limit advanced features like AI-driven scheduling

### 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 graph with multiple colored squares

AI-generated content may be incorrect.