# 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 is DriverPass, which wants to develop a system that provides students with access to online practice exams and on-the-road training to better prepare them for driving tests. The system will allow users to make and manage reservations, track progress, and handle various administrative tasks.

### 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 is looking to fix high failure rates of driving tests due to inadequate training
* **System needs include:**
* Online classes and practice tests.
* On-the-road training scheduling.
* Data access and management from any device.
* Secure user role management.
* Reservation tracking and reporting.
* Flexible package management.

### 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 registration and scheduling for driving lessons.
* Provide online practice tests and progress tracking.
* Secure role-based access control.
* Generate activity reports for reservations and user activities.
* Allow for future customization and expansion of training packages.
* **Measurable tasks that would be needed include:**
* Implement an online reservation system.
* Develop user role management functionality.
* Create modules for online practice tests and progress tracking.
* Design a secure database for storing user information and activity logs.

## 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 system accessible via browsers.
* Fast response time for user actions.
* Regular updates to ensure system reliability and security.

#### 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?*

* Compatible with Windows, macOS, Linux.
* Requires a relational database.

#### 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?*

* Unique identification of users by email/username.
* Case-sensitive input fields where necessary.
* Admin alerts for system errors or security 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?*

* Admin interface for user role modifications without code changes.
* Adaptation to platform updates with minimal downtime.
* Full access for IT admins for system maintenance.

#### 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 with strong password policies.
* Secure HTTPS connections for data exchange.
* Account lockout mechanisms after multiple failed login attempts.
* Password reset functionality for users.

### 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 register and schedule driving lessons.
* The system shall provide role-based access control.
* The system shall track and report user activities and reservations.
* The system shall allow administrators to modify training packages.
* The system shall notify users of DMV updates.

### 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.)?*

* **Needs include:**
* Intuitive and user-friendly design.
* Accessible on both mobile and desktop devices.
* **Different users include:**
* Admins: Full system access, manage users and roles, generate reports.
* Instructors: View schedules, add notes to driving sessions.
* Students: Register, schedule lessons, track progress, reset passwords.
* Secretary: Manage appointments, input student information.

### 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 internet access.
* The system will be hosted on a reliable cloud platform.
* Users will follow the password policy and security guidelines.

### 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?*

* Limited by the initial budget and timeframe for the project.
* Future feature requests may require additional funding and development time.
* Dependency on third-party services.

### Gantt Chart

