# 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 develop a comprehensive driver training system for our client, DriverPass. DriverPass aims to address the existing gap in driver training by providing online practice exams, on-the-road training, and scheduling features. The client envisions an integrated system that offers students the tools and resources needed to pass their driving license exams successfully.]

### 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 seeks to create a system that revolutionizes driver training. The current problem is that a significant number of students fail their driving license exams due to inadequate preparation. DriverPass wants to fix this issue by offering online practice exams, informative lessons, on-the-road training, and efficient scheduling and management tools. The system will consist of several key components, including user registration, scheduling, practice exams, training resources, administrative management, and integration with the Department of Motor Vehicles (DMV) for up-to-date information.]

### 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?*

* [Upon completion, the system should achieve the following objectives and goals:
* Provide students with access to online practice exams to improve their driving knowledge.
* Offer on-the-road training with experienced instructors to enhance practical skills.
* Increase overall pass rates for driving license exams.
* Simplify and streamline the scheduling and management of training sessions.
* Ensure data security and user privacy through robust security measures.
* Facilitate seamless communication among students, instructors, and the administrative team.]

## 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 should be accessible both through web-based and mobile environments.
  + Response times for accessing resources and conducting online exams should be swift to provide a seamless user experience.
  + Regular updates, maintenance, and system improvements should be performed to keep the system up-to-date.]

#### 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 should be platform-agnostic, compatible with various platforms, including Windows, Unix, and mobile operating systems.
* A backend database system is required to store user data, exam results, and scheduling information.]

#### 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 identification should be case-insensitive for user convenience.
* The system should promptly inform the admin of any critical issues or 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?*

* [
* The system should allow IT administrators to make user-related changes, such as adding, removing, or modifying user accounts, without altering the underlying code.
* It should be adaptable to platform updates to ensure long-term compatibility.
* The IT admin should have full access rights to manage user accounts, including password resets and access control.]

#### 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 should require authentication through secure methods.
* Data exchange between the client and server should be encrypted to protect sensitive information.
* A mechanism to detect and respond to brute force hacking attempts should be in place.
* The system should provide a password recovery process for users who forget their passwords.]

### 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 during the login process.
* Provide an intuitive user interface for efficient navigation and interaction.
* Allow users to register for an account.
* Enable users to reset their passwords in case of forgetfulness.
* Offer online practice exams with relevant questions and scoring.
* Facilitate scheduling of on-the-road training appointments.
* Store user information, including first name, last name, address, phone number, and payment details.
* Provide users with the option to contact the administrative team.
* Send notifications to users about appointments, exam results, and system updates.
* Allow users to track their progress and view completed exams.
* Enable administrative management of user accounts, including blocking access if necessary.
* Implement integration with the DMV to receive updates on driving test requirements.
* Offer a secure and encrypted connection for data exchange.
* Provide a user-friendly and responsive mobile interface for convenient access.]

### 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.)?*

* [

1. **Users**: The primary users of the interface are categorized into the following roles:

* Students: Students need an intuitive and user-friendly interface to access online practice exams, track their progress, schedule on-the-road training sessions, and receive notifications.
* Instructors: Instructors require an interface to view and manage their teaching schedules, student assignments, and leave comments or notes after each training session.
* Administrative Team: Administrative staff need an interface for managing user accounts, handling appointments, and overseeing system operations.

1. **Functionality**:

* **Students**:
* Access and complete online practice exams.
* Schedule, modify, or cancel on-the-road training appointments.
* View and track their training progress.
* Receive notifications about appointments and exam results.
* **Instructors**:
* Access their teaching schedules and assigned students.
* Leave comments and notes after each training session.
* Receive notifications about new appointments or schedule changes.
* **Administrative Team**:
* Manage user accounts, including user registration and password resets.
* Handle appointment scheduling, cancellations, and modifications.
* Monitor system performance and user activity.
* Send notifications and updates to users.

1. **Accessibility**: The interface should be accessible through both web browsers and mobile devices to cater to users who prefer different platforms for interaction.
2. **User Interaction**:

* Web Browser: Users accessing the system through a web browser on a computer or tablet should have access to a responsive web interface that adapts to different screen sizes.
* Mobile: Mobile users should be able to access the system through a mobile application or a mobile-optimized website for convenient use on smartphones.

The interface should prioritize ease of use, clear navigation, and responsive design to ensure an optimal user experience for all categories of users.]

### 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?*

1. [

* Users have internet access and access to compatible devices for system interaction.
* The DMV will collaborate to provide timely updates on driving test requirements.
* Instructors are adequately trained to provide on-the-road training.]

### 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 system is designed to complement traditional driver training methods but cannot replace hands-on experience.
* The system cannot guarantee the success of users in their driving license exams, as individual performance varies.
* Occasional downtime may occur for system maintenance and updates.
* Resource limitations, budget constraints, and technology availability may impact the system's development and implementation.]

### 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.*

[Insert chart]

