# 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 design a comprehensive system for DriverPass, a company aiming to provide students with access to online practice exams and on-the-road training to better prepare them for driving tests.
* he client, DriverPass, wants their system to facilitate efficient and effective preparation for driving tests, ultimately improving the success rate of students.

### 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 aims to address the issue of high failure rates in driving tests due to inadequate preparation methods.
* The system needs to provide access to online practice exams and on-the-road training to enhance students' readiness for driving tests.
* Components needed for the system include an online platform for practice exams, scheduling and tracking tools for on-the-road training sessions, user management features, and secure data storage.

### 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 offer a user-friendly interface for accessing practice exams and scheduling on-the-road training sessions.
* It should accurately simulate driving test scenarios to adequately prepare students.
* The system must be scalable to accommodate a growing user base and adaptable to accommodate future updates and enhancements.

## 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 run seamlessly on web-based environments.
* Practice exams should load quickly to provide a smooth user experience.
* Updates to the system should occur regularly to incorporate new test scenarios and features.

#### 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 compatible with various platforms, including Windows, macOS, and Linux.
* Backend support may require a database for storing user data and exam results.

#### 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 authentication should accurately distinguish between different users.
* Input should be case-sensitive where necessary.
* The system should promptly notify administrators of any issues or discrepancies.

#### 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 for user management without requiring code changes.
* It should adapt smoothly to platform updates to ensure continuous functionality.
* IT administrators should have comprehensive access rights for system maintenance and updates.

#### 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 such as username/password or two-factor authentication.
* Data exchange between the client and server should be encrypted to ensure privacy and security.
* Accounts should be temporarily locked after repeated failed login attempts to prevent brute force attacks.
* Password recovery mechanisms should be in place to assist 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 provide access to a variety of practice exams covering different driving scenarios.
* It shall allow users to schedule on-the-road training sessions with qualified instructors.
* Practice exams shall be interactive and provide feedback on incorrect answers.
* The system shall track users' progress and performance to tailor exam recommendations.

### 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 should be intuitive and accessible for users of all technical backgrounds.
* Different users, including students, instructors, and administrators, should have personalized dashboards with relevant features.
* The interface should be accessible through web browsers for 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?*

* Users have basic internet connectivity and access to modern web browsers.
* The system will be built using contemporary web development technologies.
* Users are familiar with basic computer usage for navigation and interaction with the system.

### 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 resources may constrain the speed of system development and implementation.
* Time constraints may impact the depth of features included in the initial system release.
* Budget limitations may restrict the extent of system scalability and performance optimization.

### 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.*

