# 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 system for DriverPass that enables students to access online practice exams and on-the-road training to improve their chances of passing the driving test. DriverPass aims to reduce the failure rate by providing comprehensive training tools.

### 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 address the high failure rate of driving test applicants who only study previous tests without adequate practical training. The system needs components such as a user interface for students, a backend for managing exams and training schedules, and integration with an on-the-road training booking system.

### 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 allow students to:
  + Access and complete online practice exams.
  + Schedule and manage on-the-road training sessions.
  + Track their progress and receive feedback.
* It should also allow instructors to:
  + Manage training schedules and student progress.
  + Provide feedback to students.
* The system should improve the pass rate of students taking the driving test.

## 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 web-based and accessible via browsers on various devices.
* It should have fast response times, ideally within 2 seconds for user actions.
* Regular updates should be performed monthly without downtime.

#### 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 run on Windows, macOS, and Linux platforms.
* A robust database is required to manage user data and training schedules.

#### 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 accurate, with case-sensitive input for credentials.
* The system should notify the admin immediately if any discrepancies or errors occur.

#### 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 easy addition, removal, and modification of users without needing code changes.
* It should be adaptable to platform updates with minimal downtime.
* The IT admin should have access to all system functionalities 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?*

* Users should log in with a unique username and password.
* Data exchange between the client and server should be encrypted.
* Accounts should be locked after multiple failed login attempts.
* Users should be able to reset forgotten passwords through a secure process.

### 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 when logging in.
* The system shall allow students to access practice exams.
* The system shall allow students to schedule on-the-road training sessions.
* The system shall track student progress and provide feedback.
* The system shall allow instructors to manage training schedules and provide feedback.

### 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 user-friendly and accessible on both desktop and mobile devices.
* Students should be able to:
  + Log in and access practice exams.
  + Schedule training sessions.
  + View progress and feedback.
* Instructors should be able to:
  + Manage training schedules.
  + Provide feedback to students.

### 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 that users have access to the internet and a device capable of running a web browser.
* The system will be scalable to accommodate a growing number of users without performance degradation.

### 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 may face limitations in terms of budget for development and maintenance.
* Time constraints could impact the development schedule, requiring prioritization of features.
* Technological limitations might affect the system's integration with existing tools or platforms.

### 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]