# 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 have DriverPass system provide students with online practice exams and on-the-road training. The system wants to reduce the high failure rate of driving license exams by giving tools to prepare before taking the driving test.

### 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 has seen a market for tools that will train students for driving tests. They have seen that 65% of students fail because of not having correct practice exams or on-the-road training.

### 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?*

* Give students access to online platform for tools to prepare for driving test, practice exams, schedule and manage on-the-road training, have different types of user (students, instructors and admin) to communicate with each other and the system, and have a system that is user-friendly while being secure.

## 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 is to handle multiple users at once without a decrease in performance. Have exams results near instantly and quickly load pages within 2 seconds. System will be updated as needed to handle users and updates.

#### 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 will be web accessible for mobile and desktop. Compatible with major operating systems.

#### 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?*

* The system will distinguish between three users (student, admin and instructors). The input will be case-sensitive where needed and the system will inform admin of any problems with data not showing or failed login.

#### 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 will allow changes to the user without code changes. It will adapt to platform updates smoothly. IT admin will have system setting, system logs and managing users.

#### 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 must log in with secure authentication, two-factor authentication would be perfect. Data exchange between client and server should be encrypted using SSL/TLS. Brute force hacking will have the system lock an account after a predetermined number of fail login attempts. User forgetting password will have a system that provides a safe and secure recovery 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 provide practice exams that are close to the actual driving test
* The system shall allow communication between all users students, instructors and administrators.
* The system shall track, report and save student performance
* The system shall let students schedule and manage on-the-road training sessions.
* The system shall notify users of upcoming training and exams.

### 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 needs will be intuitive and easy to navigate for all users. The user interacts with the interface by mobile and desktop.
* Students: access to training session scheduling, practice exams, tracking their performance, and notifications for upcoming events.
* Instructors: Managing training sessions, communication with students and tracking of student’s performance.
* Administrators: System settings, access to system logs and user management.

### 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 internet access. Students will practice and train regularly as needed. Instructors are provided training sessions for on-the-road lessons.

### 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 a supplementary tool it is not meant to replace actual driving practice, practice exams are built on data that is available and not cover all scenarios, and limited resources, time, and budget can affect the features and development time.

### 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 screenshot of a calendar

Description automatically generated