# CS 255 Business Requirements Document

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 provide a system for DriverPass, an online driving school. The customer is looking for a system that can manage their online course offering, including user registration, course enrolment, and progress monitoring.

### 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 for a solution that would simplify the management of their online driving classes, handle the issue of tracking user progress, and enable smooth interaction between users and the platform. User administration, course management, progress monitoring, and payment processing modules are all required.

### 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 finished system should allow users to register, enroll in courses, track their progress, and make secure payments. It should also have administrative features such as the ability to add or update course content and generate reports.

## 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?*

* To guarantee continual progress, the system should work on both online and mobile platforms, be quick and responsive, and updates should be carried out on a regular basis, at least once every three months.

#### 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 key platforms such as Windows and Unix. On the back end, a strong database system, such as MySQL, is necessary to provide data management for the application.

#### 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?*

* Users will be identifiable by their distinct usernames and passwords. Case should not be a factor in the system. Any severe system problems or possible security breaches should be quickly reported to the administrator by the system.

#### 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?*

* User modifications (add/remove/modify) should be possible without modifying the code. The system should automatically adjust to platform upgrades. The IT administrator should have complete control over users, courses, and system settings.

#### 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?*

* A unique username and a strong password are required for user login. The client-server connection or data exchange should be encrypted using encryption methods such as SSL/TLS. After three failed login attempts, the account should be locked and the user should be alerted. If a user forgets their password, they should be able to reset it using the email address they registered with.

### 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.”*

* When logging in, the system must validate the user's credentials.
* The system must allow users to register for and enroll in courses.
* The system should allow users to keep track of their course progress.
* The system must provide secure payment processing.

### 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 simple to use and intuitive. Students and administrators are the two categories of users. Students should be able to register, login, enroll in courses, check their progress, and pay. Users, courses, and reports should all be manageable by administrators. Mobile and web browsers should be able to access the UI.

### 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 are presumed to have access to a reliable internet connection.
* Users are also expected to be familiar with fundamental web navigation and procedures such as registration, login, and payment processing.

### 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 design may not cover all specific needs of every user.
* Resource constraints, time, budget, and technology may limit the scope and features of the system.

### 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 picture containing text, number, screenshot, design

Description automatically generated