# 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 project aims to develop a comprehensive system for DriverPass, a driver training company, fulfilling the requirements specified by the client, Liam. The client seeks a system capable of providing online driver training courses, practice tests, appointment scheduling for on-the-road training, user management, and remote data access.

### 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 enhance driver training by offering online classes, practice tests, and in person training.
* Necessary components needed for the system include:
  + Online classes and practice test module.
  + Appointment scheduling module.
  + User management module with distinct roles and access rights.
  + Data access module enabling information retrieval from any location.
  + Integration with DMV for updates on rules and regulations.

### 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?*

* Students should be able to do classes and take practice tests online.
* Allow for appointment scheduling, rescheduling or cancelation.
* The system should be able to keep track of user activities, appointments, and anything that changes.
* The system should have access to current DMV rules and regulations.

## 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 needs to be a web-based application.
* The system needs to be scalable and user friendly.
* There should be regular scheduled system maintenance.

#### 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?*

* It would be ideal that the application is accessible through multiple operating systems and web browsers.
* A database would be required to store user and instructor information such as appointments, grades, and course progress.

#### 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?*

* Authentication should be used to distinguish individuals within the system, like using unique usernames and passwords.
* Administrator need to be immediately alerted of any critical errors and security breaches.

#### 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?*

* Modular and reusable code should be used to implement the system, so changes can be made relatively easily.
* The application needs to be able to have updates quickly and easily.
* IT administrator should have complete access to every part of the system.

#### 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 password need to be required for every individual within the system.
* Secure connection to the internet is required.
* Accounts should be temporarily locked if there are any potential data breaches.
* Users should be able to reset their password through multiple identity verification steps.

### 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.”*

* It is required that online classes and tests be available to DriverPass students.
* Appointment scheduling, rescheduling and cancelation is required.
* Student progress and information must be tracked by the system.
* The system must be kept up to date with rules and regulations provided by the DMV.

### 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 must be readable and easy to use.
* Administrators, trainers, and students make up the different users for the interface.
* Managing users, scheduling appointments, and system maintenance should be accessible by administrators.
* Trainers must be allowed to review and maintain their schedules and student information.
* Students must have access to online classes, the ability to take practice tests, and the ability to schedule, reschedule, or cancel any appointments made.
* The system inface must be accessible from desktops, laptops, or mobile devices, and through most operating systems and web browsers.

### 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 must have an internet connection to access the application.
* Users must have the fundamental knowledge required to operate a computer/mobile device.
* The system is created with the best and newest industry practices.

### 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 for system development and maintenance like a small development team or IT department.
* Time constraints for project completion, again relating to having smaller development teams.
* Budget constraints for software and infrastructure that limit the amount of developers a team could have and the cost of tools/resources available to the developers.
* API efficiency is also a dependence for retrieving information from the DMV that is accurate and up to date.

### 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 computer screen

Description automatically generated*