# 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 allows customers to register, schedule, and manage driving lessons online.
* The client, Liam (owner of DriverPass), wants a system that provides both online training and on-the-road lesson scheduling.
* The system should help students pass their DMV exams by giving them access to online study materials, practice tests, and appointment scheduling with instructors.

### 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 the system to manage all customer and employee interactions in one place.
* The goal is to reduce manual work done by the secretary and make scheduling faster and more accurate.
* The system should allow customers to create accounts, view available driving packages, schedule or cancel lessons, and take online tests.
* It should also include administrator tools for managing users, lessons, vehicles, and instructor assignments.

### 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 make it easier for students to register, log in, and schedule lessons from any device.
* It should store all customer data, test scores, and driving history securely.
* Admins should be able to update class schedules, manage instructors, and track payments.
* The system should connect to DMV data so new rule updates or questions appear automatically in the practice test system.
* Goals include improved scheduling accuracy, faster lesson updates, and increased customer satisfaction.

## 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 smoothly as a cloud-based web application.
* It must be available 24/7 for customers to schedule or review lessons.
* Updates should occur during off-hours to prevent 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 will run on web browsers like Chrome, Edge, and Safari.
* The database and main application will be hosted on a secure cloud service.
* A third-party vendor such as AWS or Google Cloud will handle server maintenance and backups.

#### 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?*

* Each user will have unique login credentials to prevent errors and confusion.
* The system should validate data before saving, such as verifying email addresses and lesson times.
* Admins will be alerted automatically if duplicate or invalid data is entered.

#### 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 admin should be able to add, remove, or modify lesson packages without changing the main code.
* The system should adjust easily to new DMV rules and updates.
* IT staff will have full access to system settings and user management tools.

#### 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 using a secure password system.
* All data transfers will use encryption to protect personal and payment information.
* If a user forgets their password, they can reset it automatically by email verification.
* Failed login attempts will trigger temporary account locks for protection.

### 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 allow users to create an account and log in securely.
* The system shall let customers view, select, and pay for driving lesson packages.
* The system shall allow customers to schedule, cancel, or reschedule driving appointments.
* The system shall track instructor availability and match instructors to customers automatically.
* The system shall allow admins to view all activity logs, edit profiles, and manage instructor assignments.
* The system shall send automated notifications for upcoming lessons, cancellations, and DMV updates.

### 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 easy to navigate for both customers and staff.
* Customers will see their lesson progress, practice test results, and payments in their dashboard.
* Instructors will have a schedule view that lists their assigned students and driving times.
* Admins will have a separate panel for reports, user management, and package control.
* The system should work on computers, tablets, 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 access to a reliable internet connection.

* DMV systems are available for syncing updates.
* Instructors will enter accurate data about each student’s progress.
* Payment systems like Square or Shopify will process all transactions securely.
* The client will provide training to employees before the system goes live.

### 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 depends on stable internet access and cloud connectivity.
* Instructor availability may limit how many students can schedule lessons.
* DMV rules and regulations may change, requiring software updates.
* Budget limits may restrict advanced features in the first version.
* Future growth of the student database may require additional server storage.

### 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 chart with multiple colored squares

AI-generated content may be incorrect.