# 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 client is DriverPass, and they want to better prepare students for driving tests. They have come to our company to help facilitate this. The boss Liam is hoping to help fill the void in this market, helping students train for their driving tests. Many students are failing their tests with a 65% fail rate, so they need help. Liam wants them to be given access to online exams, practice tests, and on-the-road training.

• The main goal is to build a system where DriverPass and students can access the data they need from anywhere. With DriverPass being able to have authorized access to modify, record, and track information where needed.

• Allow certain users like the Big Boss Liam, the IT guy Ian, and the secretary to do their jobs. Ian should be able to maintain and modify the system. The secretary should be able to make, cancel, and modify the appointments.

### 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?*

* The problem is that DriverPass has no advanced system to do their work. Possibly using paper forms to keep track of everything. They have no backups or safety measures in place to prevent data loss. No advanced tracking system to keep records.
* Liam also wants to be able to have access to data from anywhere like a computer or phone. This would allow him to work at home using things like Excel.
* The interface should also be set up according to specification from the picture provided. Containing most of the customers’ information like photos, name, etc and the driver’s notes and photos. They also need to be a table for Liam to access that has driver comments and the time of the lesson.
* Customer data should be recorded from name, zip, address, phone, email, city, state. There should also be payment method recorded.
* On the website the customer needs to have access to three different packages to choose from.

-Package One: Six hours in a car with a trainer

-Package Two: Eight hours in a car with a trainer and an in-person lesson where we explain the DMV rules and policies

-Package Three: Twelve hours in a car with a trainer, an in-person lesson where we explain the DMV rules and policies—plus access to our online class with all the content and material. The online class also includes practice tests.

### 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 itself needs to be able to keep a record/track and be able to be modified, it should also be able to get printed out. Like seeing who last modified something, keep track of those who have access, able to deny access, reset passwords, who made a reservation, who cancelled a reservation, and make sure it is flexible to prevent issues down the line. Customers and Drivers also need to be tracked, record the time, what car, and what driver is doing the session.
* Customers need to be able to make reservations online, through call, or visiting in person. Tell the company the day and time that they will be available so they can complete the lesson.
* They also need to have an option to add or modify the packages. Packages should also be able to be taken down, so nobody tries to make an appointment when it is unavailable.
* There should be a link to the DMV so that they can keep up to date with regulations. If there is a new update DriverPass needs to know about it.

## 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 as a web-based application that can be accessed on desktop and mobile browser. For example, it should be able to be accessed on Chrome, Safari, Firefox, and Microsoft Edge.
* The system should be updated monthly for DMV information changes and every few months for features and patches.
* The system should render pages in under 3 seconds on a standard broadband connection.

#### 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 support Windows, macOS, and Linux on desktop through browsers.
* The system should support iOS and Android through mobile browsers.
* The backend should run on Linux servers through AWS to support a cloud platform.

#### 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 shall be distinguished through different usernames and case sensitive passwords.
* Every user’s action should be time-tamped and tracked, with it being logged.
* The system should inform the admin of a problem if a user’s action fails to perform.

#### 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?*

* Admins will be able to add, remove, and modify without changing the code through an admin user interface only available to them.
* The system will support switching to a new cloud provider through configuration files and update settings.
* The IT admin needs access to user management and the system to provide upkeep.

#### 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?*

* Communication through the system should be HTTPS encryption.
* The system should require a unique username. Also, a strong password with more than 7 characters including letters and numbers.
* The account will lock after 3 login attempts and require an email password reset link.
* If users forget their password, they should be emailed a password reset link.

### 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 users to see available lessons and then book, cancel, and reschedule their two-hour lessons online.
* The system shall display a calendar view of the booked and available times.
* The system shall give an online test interface with a timer and submission option.
* The system shall record tests start time, end time, and score.
* The system shall record lesson start time, end time, and comments.
* The system shall show the progress of a test and past tests.
* The system shall track all appointments and test actions in an audit log for admins.
* The system shall send notifications for new DMV updates, lesson/appointments reminders, and appointment confirmation, cancellations, and reschedules.
* The system shall allow admins to enable or disable lesson packages.

### 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 Customer, on both mobile and desktop though browser, should see a login page, dashboard (with lessons, test progress, and notifications), and booking calendar. There should also be a test interface (questions, timer, and submission), and their profile (with personal information like payment info and address).
* The Secretary, on desktop through browser, should be able to see reservations to book and see customer profiles.
* The admin, on desktop through browser, should see an admin dashboard (manage users and packages), an audit log, and the system settings.

### 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 should have an internet connection.
* The DMV will provide their current information.
* Customers have an address, email, and phone number for notifications and contact.

### 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 does not support offline activity.
* Only U.S. information is support like the phone number format.
* No multi-language or multi-currency support
* No multi factor authentication is currently available yet.
* The UI can’t be customized for user personal use.

### Gantt Chart

*Please include a screenshot of the GANTT chart that you created with Lucid chart. Be sure to check that it meets the plan described by the characters in the interview.*

A project schedule with a graph

AI-generated content may be incorrect.