# 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 (DriverPass) is looking to create a system that will provide better driving training. The system will provide online classes, practice tests, and on-the-road training (if needed) based on the packages.

### 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?*

* Liam(Owner of DriverPass) has realized that many people fail their driver exams at the

DMV and that they need better driver training. Liam and his IT officer, Ian, wants to build a system that allows clients to have more training and practice behind them before taking their exam at the DMV. They envision the system being able to handle clients taking online classes and practice exams, as well as scheduling on-the-road training with a certain drivers, time, and car.

* The DriverPass should have a team with Liam(Owner), Ian(IT Officer) and Secretary(who will be able to receive the phone calls and reservation)
* The company has 10 cars and 10 drivers.
* Liam would like to offer 3 different packages to the customer:

Package 1:

* + - 6 hours in a car with the trainer

Package 2:

* + - 8 hours in a car with a trainer
    - In-person lesson where they will explain the DMV rules and policies

Package 3:

* + - 12 hours in a car with a trainer
    - An in-person lesson where they will 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.
* Each lesson is 2-hour long (if the customer choses package 3, they would have 6, 2 hour long lessons in a car with a trainer)
* System should have role based access.
* When a reservation is edited or created, Liam would like to be able to track who made the

reservation, cancelled it, and/or modified it last. He would also like to be able to print an activity report.

* Customers should be able to make reservations for their driver’s lessons online within their account.
* Customers should be able to make appointments, cancel appointments, and modify

appointments online or by calling in/visiting the office and talking to the secretary. Information taken from the customer should include:

* + - * + First and last name

▪ Address

▪ Phone number

▪ State

▪ Credit card information

* Customer should be able to reset their password if it is forgotten.
* System should get notified if DMV has an update on rules, policies, or sample questions.
* Security officer(Ian) should get notified if there is any vulnerability.

### 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?*

* System should be a fully functional with all the requirements
* System should allow customers to Add, edit, modify and cancel the driver training.
* System should allow customers to select the packages based on their choice.
* System should allow customers to take classes and practice tests online.
* System should allow only role-based access.

## 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?*

* System should operate over the cloud so the website will be web based.
* System should be fast enough to allow users to access the website without complications.
* System should be immediately updated when new features are added.
* System should be properly configured with load runner.

#### 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?*

* System should run on Linux.
* System should use cloud to manage the backend services like security, databases etc.
* System should be mobile compatible.

#### 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?*

* Cookies within the session should be configured accurately.
* User should be able to create their account
* User should be able to login their account with valid username and password.
* All the input should be case sensitive.
* System should have multi-factor authentication to improve security against hackers accessing the account.
* System should report the admin immediately of any problems, glitches, or bugs within the website.

#### 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?*

* Application always be updated.
* IT admin should always have access to the database and server in order to be able to make necessary changes or to remove former employees who should no longer have access to the system.
* System should allow to make any changes.

#### 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?*

* User should be login with only valid credentials.
* Multifactor authentication code should be sent via SMS.
* The cloud should be responsible for the exchange of data between the client and the server.
* System should temporarily disable the accounts after four failed attempts.
* User shall be prompted to enter their email address associated with their account to have a password reset link to be sent if they forget their password.

### 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.”*

* System should be able to verify the login credentials.
* System should verify the users multifactor authentication via SMS.
* System should schedule and track appointments.
* System should be able to temporarily disable the users account after four failed attempts to login.
* Systen should provide practice exams and classes based on their packages.
* System should provide only role-based access.
* System should be able update users’ information.

### 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 allow the IT admin to make any changes.
* The interface should provide the customer with the option to purchase driving appointment packages along with taking online classes and tests.
* The system should allow the user to interact with the interface from a mobile phone, laptop, desktop, or any device with an internet connection.
* The interface should be web-based.

### 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?*

* Budget – There was no budget mentioned. We are only assuming that we can build the system as needed to meet all requirements made by DriverPass.
* Access – We are assuming that all users will be able to access the system and understand how to operate it.

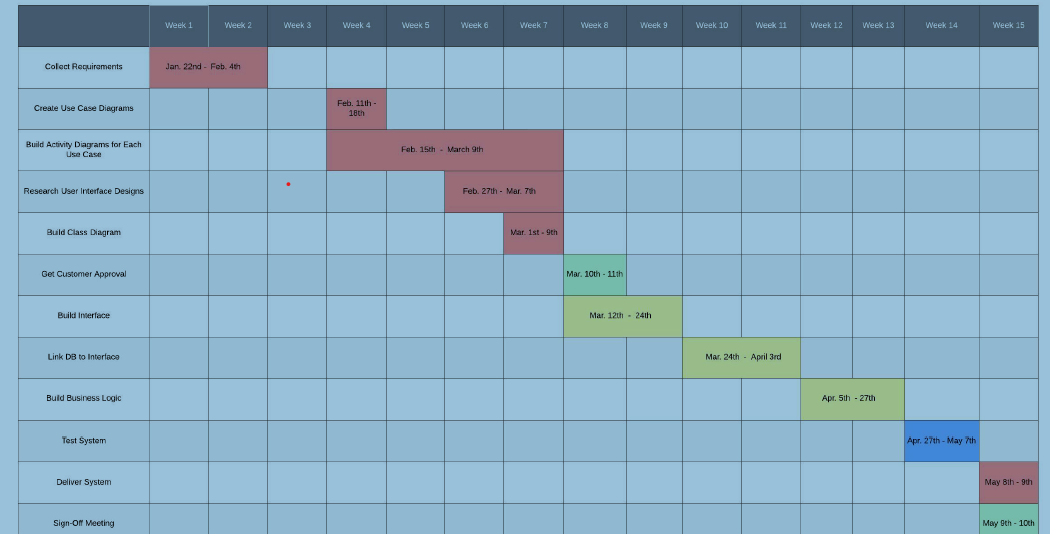
### Limitations

*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?*

* System must be compatible with all the browsers.
* System must be compatible with mobile devices.
* We have a time limit of five months to build 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.*

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