# 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?*

* DriverPass has noticed the lack of tools available on the market to help drivers pass the driving test.
* DriverPass would like us to help them make a system (website) that can provide their students with some online practice tests that will help them with the driving test. They also want the website to allow students to log training via the tests provided.

### 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 their website to help aid and fix the problem of individuals who fail the driving test.
* They will help by providing tests on their website that they want us to create.
* The system should allow training hours to be logged, 24/7 access as long as there's an internet connection, proper security features for different users, and data tracking for reservations, cancellations, modifications, etc.

### 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 be a fully functioning website that allows customers to book, modify, and/or cancel on the road driver training.
* This system should allow customers to take practice tests and classes on the website.
* The system should determine who has access to certain information (teachers/students/admins).
* Creating a UML diagram to begin the creation of the system is optimal.
* Choosing a proper operating platform and coding languages are also required to begin the creation of the system.

## 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 update frequently and DMV guidelines should be a priority in the updates to ensure proper information is available.
* The system should run on a web base.
* The system should run relatively fast due to the amount of requests from peer to server. Multiple users will be online at once so the speed will need to be adequate to those demands.

#### 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 run on any standard internet browser (Chrome, Edge, Firefox, etc.). If the site is utilized on a mobile device, the site needs to accommodate that properly (size, usability, etc.).
* The back end needs a database for the storage of information.

#### 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 have unique user emails and passwords.
* Inputs should be case sensitive for security purposes.
* There should be a failsafe if a user puts the wrong password a certain number of times (Captcha/admin notification for spamming).

#### 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 code should be manipulatable without completely changing it. There would need to be POST requests and controllers written within the code.
* The system should adapt to updates by requests from the programmers.
* IT admins will need full accessibility from users accounts to deleting information no longer needed.

#### 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?*

* The user is required to enter their email and password to log in.
* HTTP is how I would secure the connection between the client and server.
* An admin should be notified if a brute force hacking were to take place. Either the admin would be notified of the number of failed attempts to log in, or the captcha would catch it and also notify the admin.
* If a user were to forget their password, there would be a function to reset their password after verifying their identity by sending a confirmation to the email they used to set up the account.

### 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 confirm the login information a user inputs to log in.
* The system shall make changes aligned to DMV updates or changes.
* The system shall confirm customer details (address, name, card info, phone number).
* The system shall show exam progress and results for students.
* The system shall allow users to reset their passwords.

### 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 needs of the interface are a computer/mobile device that can access the internet.
* Some different users of the interface are admins, devs, teachers, and students.
* Users will need to be able to book appointments, and take online lessons or tests.
* The user will use their keyboard and mouse or touch screen (depending on the device) to interact with the different functions of the system.

### 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?*

* I think the basics were addressed in the design above. I’m sure I’ve missed out on some small features that could be implemented later in the future.
* An assumption I have suggested is there is no budget for this project. There is a lot of work to do here and a budget was not mentioned or I missed it personally if there was one. So I am assuming all of this work can be done within the budget the client has.

### 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?*

* A user with a spotty internet connection could experience some limitations.
* Time for development and a budget are also limitations that should be considered.

### 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.*

