# 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?*

* Client’s name is Liam, owner of DriverPass. Client wants to provide services to people of driving tests and training due to large numbers of people failing and lack of services which help them train. They want Driverpass to provide online classes, practices tests and road training services to people.

### 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 needs the system to be accessible online and download files from it for offline use. They want the features to be simple and easy to use and users should be able to make reservations for driving lessons. They want to fix accessibility and tracking of user records. User should be able to tell us the day and time they want to take that lesson and make it a reservation online using their account. There needs to be admin system, users system and drivers system.

### 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?*

* Drivers need to be identifiable and scheduled to go with user reservations
* Track which user is matched with which driver
* System maintainable and modifieable and owner have full access to the system. User also can make, cancel and modify appointments.
* User needs to be able to automatically reset passwords
* Get pick-up location from the user and ask them for drop-off location.
* Stay connected to DMV so they can update DriverPass with new rules, policies and sample questions and whenever these get updated, users get notification.
* Needs to be run on web browser on cloud data servers.

## 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 needs to run in web-based environment with security and backup already taken care of. The system should be able to respond to multiple users at same time on web portal and needs to be updated regularly with new DMV regulations.

#### 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 in Windows OS computers. Back end requires Web framework and database to update and maintain the application.

#### 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?*

* Using username and email addresses to differentiate between users. The input should be case-sensitive. System will send all admins message and/or email and admins can assign it to one of them.

#### 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 make changes to user information. But they should only do so with right reasons. IT admin will need database editing permissions and privileges.

#### 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 is required to provide their username/email address and password to sign in. Using security CSRF tokens, user’s data exchange will be safely transferred to and from the server. If there is a hacking attempt we will implement logging in attempt cool down which if user enters information correct for set amount within set time, they won’t be able to login. The system won’t receive any info from that location and IP for 24 hours.

### 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 should allow users to register with their essential information.
* It should be able to allow admins access to users database.
* User should be able to schedule lessons and change pick up location.
* The system shall allow user to schedule or cancel appointments.
* Admin should be able to remove lesson modules so user doesn’t register in them.
* The system shall use email or security question verification methods to verify users login attempts.

### 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.)?*

* Interfaces are designed to provide simplicity and flexibility for the users to accomplish their goals. System’s different users are admins and users. Admins need to be able to update user information, remove and add lesson modules and respond to issues raised by the system.
* User should be able to register, login, schedule appointment, pickup and cancel them.

### 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?*

* System’s link to DMV and it will be connected to their guidelines and rules
* Many users will be accessing the application via their mobile phone browsers so browser compatibility is important

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### 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 may not be able to handle large amounts of users accessing it at one time.
* Database may not have storage capacity to register large amounts of users.
* Some features may be unfinished or missing on final product due to time and/or budget.
* Depending on web framework used, some features will cause an issue in 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.*

Chart, waterfall chart

Description automatically generated

Use case diagram

Diagram

Description automatically generated

Activity diagram

Diagram

Description automatically generated