# 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 owner is Liam.
* Liam wishes to take advantage of a void in the market for training students for their drivers test at the DMV.
* They want a system that offers students online classes and practice tests to student drivers.
* The system must handle all of this and have a way for students to request on-the-road training.

### 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 system must help to access data from anywhere online and offline.
* Hierarchical tiers of access for security. Accounts of a lower level may be removed by a higher level. Passwords from a lower level may be reset by a higher level.
* The system must track changes to reservations and be able to print an activity report to figure out who did what.
* The system must allow users to create reservations for lessons, each one is two hours, the user chooses the day and time of the lesson, the reservation is made online with the user’s account or via a call/visit to the office to schedule it. The system must track the driver the reservation is with, it must track the driver, user, time, and car. Reservations must be editable by the user online.
* The system must offer three packages to the user, these packages should be customizable in the future and the system must be flexible. The packages are as follows: P1 – 3 2 hour lessons, P2 – 4 2 hour lessons and an in person class on DMV rules/policies, P3 – 6 2 hour lessons, an in person class on DMV rules/policies and access to online classes that have course content and practice tests. These packages must be able to be disabled by the owner.
* Registration occurs via a phone call, user gives the following information, First/Last name, Address, Phone Number, State, Credit Card Number (including expiration date and security code), and a pick-up/drop-off location. This registration should also be available online as well.
* The system must allow for users to automatically reset their own password.
* The system must be connected to the DMV and provide a notification if there are any new rules, policies, or sample questions.
* The system should be cloud based as the owner does not wish to handle backup and security.
* The system must be web based.
* A sketch of a computer test

  Description automatically generated with medium confidenceSample of webpage is as follows:

\*Test progress can be taken,

In progress, failed, passed.

\*In driver notes, a spreadsheet

Must be shown with the

Following columns:

lesson time

Start hour

End hour

Driver comments

* Pages include, input form (name, address, etc.), contact page (user -> company and vice versa).

### 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 must allow users to create reservations for lessons, each one is two hours, the user chooses the day and time of the lesson, the reservation is made online with the user’s account or via a call/visit to the office to schedule it. The system must track the driver the reservation is with, it must track the driver, user, time, and car. Reservations must be editable by the user online.
* The system must help to access data from anywhere online and offline.
* Hierarchical tiers of access for security. Accounts of a lower level may be removed by a higher level. Passwords from a lower level may be reset by a higher level.
* The system must track changes to reservations and be able to print an activity report to figure out who did what.
* The system must allow for users to automatically reset their own password.
* The system must be connected to the DMV and provide a notification if there are any new rules, policies, or sample questions.

## 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 program should be web based
* The system should run quickly and without delays
* The system should be updated by Liam receiving a notification when the DMV updates their rules, policies, and sample questions.

#### 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?*

* It should run on any system that could run web based applications.
* It should be cloud based.

#### 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?*

* Admins should be informed of unauthorized changes and errors in the system.
* Different users are distinguished by their accounts which have a password, passwords are case sensitive.

#### 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?*

* Users should be able to be added, removed, and modified without directly accessing the code.
* Modules can be hidden or shown by non-devs, but cannot be changed, modified, or added by non-devs.
* The system should push out notifications prior to an update occurring so no users are not warned of it (same with server maintenence).
* The IT admin needs a high level of access but not high enough that it outranks the owner, Liam.

#### 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 needs their username and password but will likely need a temporary username and password based on the information they give via a phone call.
* Communications should be encrypted to prevent leaks of information due to the sensitive nature of account info.
* The account should be locked temporarily when a brute force attempt is made on the account.
* If the user forgets their password, they can request the password to be reset.

### 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 manage lessons either online or via a phone call to a secretary.
* The system shall allow users to view lessons online.
* The system shall use roles to determine levels of security clearance when it comes to the system.
* The system shall allow an IT admin to hide packages when referring to lessons.
* The system shall allow an IT admin to view a report on activity that has occurred to the system.
* The system shall connect to the DMV to receive notifications of updates made to DMV information.
* The system shall allow for accounts to be created when given the proper personal information.
* The system shall be a web based application that runs on the cloud.

### 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 include information such as personal information, current progress, driver notes, needs of the user, a photo of the driver, and a photo of the student.
* The interface should allow the driver to add notes to the user’s page.
* The interface should allow the user to schedule lessons.
* The interface should allow for different kinds of users of different capabilities, some users might be the account owner (student), the driver, and the administrator.
* The student must be allowed access to manage their own account and lessons.
* The driver must be allowed access to their associated students’ pages so they can add notes.
* The administrator must be allowed access to all user pages that fall lower in authority to them.
* All users should interact with the interface via the web browser.

### 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 will have a username and password
* Users will be able to access the website
* Users will be able to send or receive calls if necessary
* The interface will have multiple pages to manage different aspects of 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?*

* The system must be designed that it can be run on a cloud system that budget allows for.
* The system must be fully designed and finished by the deadline (May 12).
* The system must be able to be finished while staying within budget.

### 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.*

