# 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 an entrepreneur looking to fill a void in the driving training market.
* The client wants their system to support training drivers through online and scheduled means.

### 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 a system that supports a business based upon training people to drive over the course of several 2-hour intervals.
* DriverPass wants the users to be able take online classes and practice tests.
* DriverPass wants this system to streamline the user’s actions and input. The system should also allow for the client to view this information as necessary.

### 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?*

1. The ability to Access data from anywhere, online as well offline.
2. The client and other specified users need selective administrative permissions within the system
3. Document when a change is made to the system including who made a reservation, who canceled it, and who modified it last.
4. The ability to print an activity report for modifications to the system
5. The ability to make reservations for 2 hour long driving lessons on a specific date and time using an account.
6. The ability to identify the driver, time, and car scheduled into each reservation.
7. Choose-able packages by the users created by the clients through their accounts. The original packages should be:

* 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.

1. The module system needs to be flexible so that the ability to add and remove packages is possible by a developer or a system analyst.
2. Registration for the packages should allow for the entry of the customer’s first name, last name, address, phone number, state, and their credit card number, expiration date, security code, pickup location and drop-off location in which the drop-off should be the same as the pickup location.
3. The ability for the user to reset their own password automatically.
4. A connection to the DMV used to Notify the client of when there is an update of rules, policies, or sample questions from the DMV.
5. The system needs to run off the web, preferably over the cloud. The client does not want to deal with backup and security.
6. The interface should look like the picture provided, in which the user can see their online test progress for the test they took. This should show the test name, time taken, score, and status. The status could be not taken, in progress, failed, or passed.
7. There should be an input for the student or secretary for the student’s information such as first name, last name, address, and more.
8. There also should be a page for contacting the client, and a way to contact the student.

## 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?*

* Web based application that should run within a reasonable 1 second or less per page excluding the home page which is more active and has more information to process. Updates should at am minimim bi-monthly unless the DMV makes more frequent updates.

#### 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?*

* In order to be cost effective, the system should run on Windows, MacOS and Linux. No back-end tools should be required at this level of system.

#### 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?*

* Different users will have different accounts that have different usernames, passwords, and IDs associated with these accounts. The system should have exception catching in place for common problems, even if they aren’t anticipated.

#### 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?*

* Changes to the system without modifying the code should be available in pre-determined circumstances where a method and interface has already been created to allow for such. The exception to this is the package modifications since that would require the IT admin. This means the IT admin needs access to some administrator level privileges concerning packages within the system.

#### 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?*

* Username and password is required for the user to log in. Data is anticipated to be stored in the cloud for more security. Brute force hacking attempts should be thwarted by an additional requirement added after several failed attempts where a randomly generated word must by typed into the box. If the user forgets their password, they must verify themselves with the email attached to the account. If successful, the password should be changeable for the next hour one time and the previous password remains unaccessable.

### 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 humor DMV updates. The system shall allow for the user to change their password after verification. The system shall be able to allow the user to take tests and quizzes online. The system shall allow the user to create/edit/delete reservations. The system shall allow the administrator to download a report for offline use. The system shall allow for the organized information for the reservations, drivers, and locations involved.

### 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 needs to be readable and accessible to both the common user and the disabled as much as possible. Within the interface, the user should be able to navigate between their reservations, purchase packages, and take/study tests with reasonable ease. They will interact with this interface using mouse and keyboard. The mobile app will be discussed in the future with the client.

### 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?*

* Our system assumes the users have internet access, computer access, and power. The system also assumes that the user has a minimum level of capability to use their computer in an effective way.

### 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 design of the system is likely to be limited by time and budget. A cloud system can be expensive and setting up a system before the hole in the market gets filled by another entrepreneur is greater than zero. There are realistically only so many features that can get added before the product must be shipped or else the idea may get taken or become ineffective.

### 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.*

