# 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 purpose of this project is to build an app for DriverPass that will help to address the level of quality training available for drivers preparing to undergo a dmv test by creating an app which will serve as an interface for a service that combines driving practice with online classes and practice tests. This should create a better program that will increase driving test pass rates for users.

### 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 problem that DriverPass wants to fix is low pass rates for driving tests at the DMV
* The app will allow users to make reservations for driving tests
* The app will allow users to purchase different driving lesson packages
* The app will track the status of the online tests available to the users.
* The app will have different roles for users allowing different privileges for different users.
* The app will be able to download reports to be used offline.

### 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 app will allow both users and the company secretary to schedule reservations by entering the user’s first and last name, address and contact information.
* The app will track changes to reservations in addition to who made the changes.
* The app will allow the user to select one of multiple driving lesson packages when scheduling a reservation
* The driving packages initially available will be a 6 hour package, a 8 hour package with in person rules lesson, and a 12 hour package with in person rules lesson and access to online content and practice tests.
* The packages will be created in the app in such a way that new packages could be added in the future, and existing packages can be removed by the admin.
* There will be a student role, a secretary role, and an administrator role with each role having different permissions.
* The app will be able to download reports for offline use.
* The app will track the tests that a user has completed, whether they were passed or not, what the score was as well as the date they were taken.

## 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 be a cloud based web application.
* The system should have relatively fast response times under 2 seconds for most actions.
* The system should be updated at least as often as the DMV updates its rules policies or 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?*

* The system should be platform independent as it is web based, and should support the most common web browsers Chrome, Safari, Firefox and Edge.
* The system should also support mobile browsing.
* The system will need a database to store customer information such as contact info as well as test progress. The same database can be used to store information for user validation.

#### 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?*

* Each user should have a unique and case-sensitive username.
* User input such as contact information is also case-sensitive and should be validated at a basic level for things such as a valid zip code.
* The system should keep a log of all errors, and if the error is severe enough or if enough errors occur within a short time period should notify the system admin.

#### 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?*

* New users should be able to be easily added by anyone.
* Users should have the ability to modify their own accounts with ease.
* Admins should be able to remove or modify any user.
* Packages can be activated or deactivated by the admin but significant platform updates which change or interfere with the functionality of the system will require an update from the developer.

#### 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 will be required to enter their username and password in order to log in.
* The web application will use https protocols to secure the data exchange between client and server.
* The user should be temporarily blocked from logging in for 10 minutes if the wrong password is entered 3 times in a row.
* The user should be able to reset their password and create a new password with a link sent to their email 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.”*

* The system shall validate user credentials when logging in.
* The system shall have different access privileges for customers, secretaries and admins.
* The system shall allow the creation, cancelation and modification of appointments.
* The system shall offer a package including 6 hours in a car with a trainer
* The system shall offer a package including 8 hours in a car with a trainer as well as an in person lesson where DMV rules and policies are explained.
* The system shall offer a package including 12 hours in a car with a trainer, the in person lesson as well as access to an online class including instructional content and practice tests.
* The system shall allow packages to be enabled or disabled by the admin.

### 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 user Interface should display the test progress, contact information, driver notes, special needs and a photo of the driver and the customer.
* The test progress should show the test name, time taken, score and status such as not taken, in progress, failed or passed.
* The contact information includes name, address, city, state, zip, phone and email and should be able to be input or updated by the user.
* Driver notes include lesson start and end times as well as notes from the driver.

### 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?*

* The user will have a computer or mobile device with an internet connection fast enough to transfer the necessary data.
* The user will enter valid contact and payment information.

### 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 user will not be able to interact with the system without an internet connection.
* As the system is being developed by an outside company, any significant changes to the system will require additional work and time to be implemented rather than being able to be updated in house.

### 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.*

