# 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 from the of the client DriverPass, they want a to implement a system to give training to drivers to take their tests at the DMV.

### 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 identified is that many drivers fail their driver’s test. DriverPass wants the system to give drivers the opportunity to practice and take questioned tests before scheduling their exams. DriverPass in conjunction with allowing drivers to test, they want to offer road training as well.

### 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 allow users to create an account
  + Name, address, phone numbers, and payment information
* The system should allow users to schedule appointments
  + Choose packages for training purposes
* Some other funtions of the site should include
  + Password Resets
  + Administrator rights to certain persons
  + Keep a record of reservations, and show availability
  + Ability to review your tests and other notes

## 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?*

* This system should be ran on a web based cloud environment
* Quick server response times
* Ability to maintain system frequently

#### 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?*

* Due to being ran on a web based, system to access to an internet portal
* Backend systems to store user data and manage requests

#### 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?*

* To distinguish different users there will be separate login portals for different users
* Input should be case sensitive to improve security
* The system should inform an admin of a problem daily

#### 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?*

* User role changes should be managed outside of the code on the back end
* The system should should adapt to platform updates with frequent maintenance
* IT admins should have access to the back-end database to maintain 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?*

* A case-sensitive password and username is required for login
* Implementing a 2FA system using phone numbers or email should be an extra security addition
* User accounts should be locked after 3 failed attempts locking the account
* Resetting your password will unlock 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 verify the user's username and password during login.
* The system shall identify whether a user is a customer or an admin.
* The system shall provide an option for users to reset their passwords if necessary.
* The system shall permit up to five login attempts before locking the user out and notifying the admin.
* The system shall enable the creation of user accounts with their information.
* The system shall allow access from any online location.
* The system shall display various package options for customers to choose from.
* The system shall enable customers to select and purchase a specific package.
* The system shall allow admins to disable fully booked packages.
* The system shall track which user is assigned to a specific driver, time, and car.
* The system shall integrate with the DMV to receive updated information.
* The system shall display customer information, test progress, and status.
* The system shall show driver notes.
* The system shall display lesson times, including start and end hours.
* The system shall show photos of the driver and the student.
* The system shall provide customers with access to online learning tools.

### 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 system should be able to be interacted through browsers or handheld devices
* Different users include, employees, administrators, and customers

**Customer Access**

* Login/Register page
* Home page
* Test progress and scores
* Test pass/fail status
* User profile with update options
* Driver notes, lesson dates, and times
* Package details
* Online learning resources
* Contact information page
* Registered customer information

**Administrator Access**

* Selected packages and corresponding customers
* Ability to remove entire packages
* Customer and driver matchups with dates and times
* Password reset authorization for users

### 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 site should be available 24/7
* The layout will be easy to navigate
* All users have access to some sort of internet device

### 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?*

* Availabilty based on cars and time
* Users may not own devices or have access to internet
* Potential lack of budget for expanding

### 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.*

