# CS 255 Business Requirements Document

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

* This project is for a drivers instruction company. The purpose of the project is to provide prospective drivers with online driving classes, online practice tests, and in-person driving instruction that is intuitive to schedule and access.

### System Background

* The client requested a system that provides students access to classes, practice tests, and relevant information about in-person appointments.
* The client wants to provide driving instruction to prospective drivers that are trying to pass the relevant DMV exams.
* The system includes a website interface for customer/employee interaction and a back-end data structure that manages relevant user information. The system should be cloud-based and run entirely off the internet.

### Objectives and Goals

* The system will provide customers with the following functions:
  + Access online class
  + Access online practice tests
  + Ability to schedule in-person road training online
  + Access website from any location with login credentials
  + Ability to register an account online with relevant contact information
* The system will provide employees with the following functions:
  + Ability to schedule in-person road training for users
  + Ability to access current DMV information/policies through website
  + Access website from any location with login credentials
  + Ability to manage user/employee account privileges
  + Access activity reports for reservations

## 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 run on all devices that support the HTTP protocol
* The system should run a client based environment that conforms to the input of a mobile or desktop device

#### 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 support web-based retrieval of data from any computer or mobile device
* The system should provide a cloud based database

#### 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?*

* The system should require input during authentication to be case sensitive
* The system should assign roles to appropriate users such as admin/boss, IT, secretary, or customer
* The system should distinguish customers that purchased different forms of packages available

#### 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?*

* The system has an admin role that has access to change user accounts without changing code
* The system should receive input from DMV policies, rules, sample questions resources and relay that information to staff
* The system should allow staff to modify or delete package options

#### 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 system should require and admin role to reset the password of a user if they forget
* The system should require a username and password to log in as an appropriate user
* The system needs to have a method of authentication before the user reaches their 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 provide activity reports for common user activities
* The system shall create a driving reservation based on user input (day, time, and length) on the website
* The system shall modify or cancel a reservation based on user input on the website
* The system shall identify the driver that a customer is matched with and return this information to administration and the customer
* The system shall receive input from a customer about the package they want to purchase and process their payment
* The system shall receive information from the secretary to register a new user with descriptive information (First/Last Name, Address, Phone Number) and payment information (Credit Card Number, Expiration Date, Security Code)
* The system shall create a driving reservation based on the secretary's input (day, time, and length)
* The system shall create a pick up and drop off location based on user or secretary inputs

### 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 provide an interface to modify package details on the websites
* The system should provide a main page for the customer to view current test progress, basic information, driver notes, photo ID's, and special needs
* The system she provided content in two large columns that section content in a block style for the main customer page
* The block that provides test progress should be formatted in a line-style with name, the time taken, score, and status
* The system should provide a report to administration for each driver that includes lesson time, start hour, end hour, and driver comments in a grid-style chart
* The system should provide an input form that's includes basic contact information, payment information, and package choice that is completable by customers or a secretary
* The system should provide a main page for the boss that includes activity reports, a list of admin functionality, and updates of DMV information.
* The system should provide a main page for the IT role that provides activity reports for debugging, updates of DMV information, and functionality to modify the website
* The system should provide a main page for the secretary that provides access to a new user input form, updates of DMV information, and a list of other relevant secretary functions

### 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?*

* There are enough drivers to fulfill all appointment requests
* The cloud based databases are reliable and secure
* Customers have access to devices that supports client software

### 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?*

* Modules cannot be added or removed easily without a system analyst or developer
* Information can only be updated from devices connected to the Internet
* Users can only reset the password with administration approval

### Gantt Chart

