# 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 the project is to develop a training system that can provide a means for new drivers to become experienced and provide the needed tools for competent driving abilities. This is to include online and offline components.
* The client is DriverPass. They want a system that provides online classes and tests. It also needs the ability to make reservations for the students and allow for follow up in regards to their progress throughout the course.

### 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 the system to be functional in an online aspect as well as be able to function offline. Specifically the following functionality needs to be available:
  + Make and alter reservations
  + Update information
  + User management solutions
* The problem they are trying to fix is inadequate and inefficient training for responsible driving. They aim to ensure complete compliance with DMV standards.
* The following components are needed for the system:
  + A Role based system for user management
  + Online Classes
  + Schedule and Reservations
  + Reporting

### 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 be able to do the following when completed:
  + Provide online and offline access for users
  + Provide scheduling of reservations and well as the ability to change them
  + Provide tracking of the progress of the user throughout the course

## 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 needs to run in web and mobile environments
* The system should run on a less than 3 second response time for actions
* The system should be updated monthly

#### 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 run on Windows, Unix environments, as well as mobile platforms such as android and apple
* Databases will be required for data management as well as session management. Cloud services could be utilized for this as well.

#### 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 will utilize roles and unique id’s for different users
* The input will be case sensitive for credentials
* The system should inform the admin when errors occur of if there is suspicious activity.

#### 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?*

* In order to allow for changes to user information without changing the base code, admin level administration will be built into the system.
* IT admin will need administrative access to allow for maintenance and troubleshooting of problems.

#### 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 requirements for a user login are a unique user name and password. Possible multi factor authentication could be implemented as well.
* Encrypting the data secures the data exchange between the client and the server.
* To prevent a brute force attack, the system will lock out after 3 failed attempts. Recovery of the account should be done through a verified email.
* Recovery of the password should be handled through a verified email.

### 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.”*

* Validation of credentials at login
* Schedule, alter, cancel reservations
* Generate reports based on the users progress and interactions
* Apply DMV updates on policies and tests

### 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 needs of the interface include being intuitive, easy to use and understand, as well as being efficient to operate.
* Users include:
  + Admi
  + IT
  + Customers
* Different users will have different roles and therefore be allowed different levels of access in the system. Things that users will need to be able to do are maintenance, security, scheduling, create, cancel, and modify, reservations, view course progress
* The interactions will take place through mobile apps as well as in web browsers

### 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?*

* Access to the internet
* Access to needed technology such as computer or mobile device
* User has basic communication skills
* User has basic technological skills

### 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?*

* Limitations include customizations for the end user, the number of users the system can handle, the timeframe in which the information is updated
* The amount of work that can be done will be limited to the size and skill level of the team. The features could be limited based on the budget as well.

### 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.*

