# 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 system for DriverPass that will help facilitate driver training in online classes and practice tests. It will also allow for on-the-road training. The client, Driverpass, aims to improve driver training efficiency and accessibility by offering training solutions that include physical and virtual services.

### 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 to address the need for better driver training and to provide more efficient and accessible methods for individuals preparing for their driving tests. The system should allow online reservations for driving lessons, track user activity and provide access to the data from both online and offline environments. The system will also include components like a user interface for reservations, competent backend for tracking and managing data and a reporting module.

### 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 support online and offline data access, reservation management and tracking of user activities. It must allow for secure access for multiple different user roles like admin, moderator or manager and also allow for the tracking of driving lessons.  
    
  Measurable Tasks Include
* Collect Requirements
* Create Use Case Diagrams
* Build Activity Diagrams for Each Use Case
* Research User Interface Designs
* Build Class Diagram
* Get Customer Approval
* Build Interface
* Link DB to Interface
* Build Business Logic
* Test System
* Deliver System
* Sign-off Meeting

## 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 online/web based, running on the cloud to minimize tech problems and autonomously handle backups and security. It should perform well across various devices both computer and mobile and be capable of managing multiple users concurrently without performance degredation.

#### 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 operate on most common web apps and OS’s. It requires a reliable cloud-based infrastructure to support it’s web-based operation.

#### 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?*

* User credentials and data entries should be accurately processed, munged and tracked. The system should handle case-sensitive data where necessary and notify a moderator/admin/higher role when any discrepancies arise.

#### 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 must allow for modification of user roles and permissions without requiring hard coded changes. It should be adaptable to platform updates with very little disruption to user interaction. IT needs sufficient access to manage user accounts and this includes resetting passwords and blocking access.

#### 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?*

* Users must log in with their own unique credentials and the system should implement secure connections (HTTPS) for the exchange of data. It should include measures to prevent brute force attacks (similar to cloud flare) and lock the account if one should occur. Password recovery should also be able to be done autonomously.

### 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 will allow users to access data online and offline (Modify while online)
* The system will provide functionality for making, modifying and canceling reservations online.
* The system will track user activities and generate reports on reservations/modifications
* The system will support different user roles with varying access rights.
* The system will integrate with the DMV to receive updates on rules and policies.
* The system will allow customers to reset their password if forgotten

### 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 must support multiple users, including customers, admins and managers. Customers will be able to make, manage and modify reservations. They will also be able to track their progress and view the results of their tests. Admins and managers should have access to manage user accounts, activities and the ability to generate reports.

### 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 system will be developed using cloud-based technology for scalability and reliability.
* Users will have access to the internet to use the system's online features.
* The DMV will provide updates on rules and policies.

### 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 initial system will not support the addition or removal of training packages by non-developers; such changes will require future updates.
* The project timeline is subject to changes based on client feedback and any technical issues.
* Resources and budget constraints may limit the scope of the initial system design.

### 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.*

