# 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 goal of this project is to assist individuals in preparing for their driving tests and improving their chances of passing. The client, DriverPass, has extensive requirements for the system. They want to offer online classes and practice tests for students, provide a means to schedule on-the-road training, manage schedules for multiple users and drivers, allow downloading of reports for Excel use, and notify staff when the DMV updates their requirements.

### 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 aims to address the issue of individuals failing their driving tests by implementing a comprehensive system. This system should include a scheduling section, a user information section, a testing/online class section, and a space for drivers to submit notes. These components will collectively ensure the functionality required to support students in their preparation and success.

### 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 provide users with online practice tests and training, allow them to reserve driving slots, track these reservations, and download the data for offline use. The key tasks to achieve this include ensuring the usability of online classes and tests, enabling the scheduling of driving sessions, allowing users to view their previous reservations, and facilitating the download of this information.

## 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?*

Given the need for compatibility across various devices, from PCs to mobile phones, a web-based system will be the most effective solution. The system should operate with minimal latency to ensure users do not experience any noticeable delays. Additionally, it should be updated immediately whenever changes are made, or at least once daily.

#### 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 compatible with all platforms, including Windows, Unix, Android, and Apple. The backend will be cloud-based, utilizing a service provider like Amazon, which will minimize the required tools and effort for backend development.

#### 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 between users, they must register on the website. During registration, users will need to provide information such as their name, address, phone number, and more. This data will enable us to effectively distinguish between an unlimited number of users. The input fields should be case-sensitive to account for names and states. Additionally, the system should promptly notify the admin of any issues.

#### 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 owner and high-level users will have the capability to manage users within the system without needing to alter any code. The IT admin will have full access to the system, enabling them to perform maintenance and make modifications as necessary.

#### 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?*

To log in, users will need to enter their name and a password they have set. To protect against brute force hacking attempts, the account should lock after a specified number of failed login attempts. If a user forgets their password, they should be able to contact DriverPass and request a password reset from a higher-level user, such as someone in the IT or Owner roles.

### 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 during login.

The system shall manage driving times with available slots.

The system shall track when users register for driving times.

The system shall notify the staff when the DMV makes changes.

The system shall track which drivers and cars are paired with which users.

### 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 should include distinct sections for online testing, driver notes, user information, and identification for both drivers and users. Users should be able to view their online classes and practice tests, schedule driving sessions, and check on previously scheduled sessions. Additionally, the interface should be accessible and functional on any platform the users choose to interact with.*

### 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?*

We are assuming that our users have access to a platform, whether it be mobile or computer. Additionally, we are presuming that they possess basic technology literacy and are familiar with navigating the web.

### 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?*

Some limitations in our system design include integrating with the DMV system and having the flexibility to add or remove driving packages. Additionally, there is a concern that we may not complete the system within the given timeline due to time and budget constraints.

### 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.*

[Insert chart]

