# 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 client is DriverPass
* Owner is Liam
* Purpose of the project is to provide top-tier training for student drivers
* Take online classes and practice tests
* Possible on-the-road training

### 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?*

* Access data online from PC and mobile devices
* The problem they want to fix is the lack of quality training for student drivers, resulting in failed driver tests
* Components: reservation/registration system, different package components, cloud data, input forms for student information

### 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?*

* User Management and Security: Provide role-based access controls for employees, including password resets and blocking access.
* Reservation System: Allow customers to schedule, modify, and cancel appointments for driving lessons online, over the phone, or in person.
* Lesson Tracking: Manage and track customer lesson schedules, driver assignments, and vehicle usage.
* Package Customization: Support flexible package offerings that can be disabled or modified as needed.
* DMV Compliance: Stay updated with DMV rule changes and practice test updates.
* System Integration: Build a database, integrate it with the interface, and include a business logic layer for security and role management.

## 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 environment needs to be web-based with a preference in cloud technology
* The system should be quick with responding to user actions, loading content, and completing tasks
* The system should be updated with each DMV update

#### 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 modern platforms, such as Windows, Apple (PC and mobile), and Android
* The backend does require a database to support the application and must be accessible to download such data and export to Excel (such as a SQL server)

#### 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?*

* Each employee will be assigned different roles and permissions. For example, the Owner would have full access over all accounts
* The system should inform the admin of a problem whenever there is any change to the record in the system, and must be clearly recorded and printable as an activity report

#### 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 would have permissions to change the user accounts in the case of forgotten password, employee dismissal, etc
* The system is unable to make massive changes to the platform, such as adding or removing modules, at this point – maybe in a future release
* The IT admin should manage general maintenance to the server, platform, user accounts, and general troubleshooting

#### 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?*

* If a user forgets their password, the user should be able to reset the password themselves via a link to their email for example
* The user needs the following to register: full name, address, phone number, state, and credit card information. User should be able to log in online
* You can secure the connection and data exchange by using encryption and secure protocols. If there is a brute force hacking situation, multi-factor authentication can help protect the user account. Also, the account can be automatically locked after a certain number of attempts

### 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 allow admins to create and modify user accounts
* The system shall restrict access to certain features based on user roles
* The system shall allow customers to make and modify reservations online
* The system shall allow the admin to disable packages
* The system shall connect to the DMV to receive new policies

### 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.)?*

* Interface should be user-friendly so customers can register, schedule, and track lessons with ease
* Different users are the following: Customer/Student, Secretary, Admin, IT Officer
* Mainly accessed via mobile and web browser, users can interact via buttons, drop-down menus, input forms, etc

### 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?*

* All users have reliable internet access and basic computer literacy
* Payment processing will be via 3rd party vendor
* Current developmental timeline covers only planned features, not future features

### 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?*

* Timeline may be affected via possible additional features
* Future features can affect budget
* Data cannot be synced offline
* DMV integration can be difficult to implement

### 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]