# 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 this project is to build a web-based system that provides driver training and testing services for applicants. The client is Driver Pass, and the system should be able to support online and in-person driver training, customer reservations, package selection, online classes, practice tests, and staff role management.

### 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 fill market gap in driver education and DMV test preparation. The problem they are wanting to fix is that many people fail their DMV tests due to inadequate training. Some system components are online user accounts and password recovery, reservations and scheduling for driving lessons, online learning modules with tracking and practice tests, driver notes and session reports, flexible package management, access control for admin, seceratary, IT, and customers, ability to make system changes.

### 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 enable custmers to register, schedule, modify, and cancel appointments online or by phone. Offer 3 tiered packages with different features and access levels. Support role-based system access and permissions. Track user interactions, driver logs, progress. Integrate with the local DMV to receive rules and content updates. Also should be able to access via web and mobile.

## 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 in a web-based environment accessible from both web and mobile. It should be able to support real-time updates. Updates should occur regularly – 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 be compatible with Windows, Mac, and linux, Android, and IOS. It will be web-based and cloud-hosted to handle backups and security. Backend should use a relational database to access information from anywhere. It must be compatible with modern web browsers.

#### 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?*

* Users are identified by unique login credentials with role-based access. Usernames and emails are not case-sensitive, but passwords are. The system will alert the admin in case of login failures, data errors, or system 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?*

* Yes, the system should allow adding, removing, or modifying users through the admin interface without code needing to be changed. It will be designed to adapt to platform updates using modern web-standard technologies. The IT admin will have full system access, managing accounts, resetting passwords, disabling packages, and monitoring system activity.

#### 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 credentials – username and password. All data exchange will need to be encrypted like HTTPS encryption. For brute force attacks, after multiple failed logins attempts the system will lock the account temporarily. If a user forgets their password, they can use secure password reset feature with email verification.

### 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 when logging in
* The system shall allow customers to register by providing personal information, as well as payment information
* The system shall enable customers to schedule, modify and/or cancel driving lesson reservations online.
* The system shall assign customers to specific drivers and cars for each lesson.
* The system shall track lesson times, driver comments, and session details
* The system shall provide access to online classes and practice tests
* The system shall record and display progress, scores, and status.
* The system shall notify admins of DMV updates and system events.
* The system shall allow customers to securely reset forgotten passwords via email verification
* The system shall provide role-based access control
* The system shall allow disabling of packages without requiring developer intervention.

### 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 be web based and responsive. Accessible from both mobile and web.
* Customers will need to register accounts, schedule/modify appointments, access online classes and practice tests, and view status and notes.
* Secretary will need to mange customer registrations, schedule and update appointments made by phone or in-person. View and edit customer information.
* Drivers need to view assigned schedules and enter comments.
* IT Admin will need to manage user accounts, reset passwords, disable accounts, and monitor system activity and notifications.
* Owner wants to access reports, monitor user activities and lesson progress, and disable training packages if needed.

### 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 budget, so I’m assuming that everything needed to develop the system will be within the budget.
* The DMV provides timely updates to keep the information accurate
* Payments for packages etc.. will be through a third party service

### 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 package customization can only be done by a developer
* The system cannot fully function offline
* DMV updates will be limited depending on whether they offer a reliable update method.

### 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.*

*A screenshot of a computer

AI-generated content may be incorrect.*