# 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 create a system for DriverPass that helps people get ready for their driver's license tests.
* DriverPass wants the system to be easy for users to study for the written test and book driving lessons for the practical test.
* The main goal is to make the process of preparing for a driver's license faster, simpler, and less stressful for users.

### 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 that makes it easier for people to study for the driving test and book lessons.
* The problem they’re solving is that it’s currently hard for users to find reliable practice materials and manage lesson scheduling in one place.
* To fix this, the system needs:
  + A study section with practice tests and study guides.
  + A scheduling tool so users can book and manage driving lessons.
  + A simple design so anyone can use it easily, even if they’re not great with technology.
  + A backend system to save progress, schedules, and user data securely.

### 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?*

* When the system is finished, it should:
  + Let users access study materials and practice tests for the written exam.
  + Help users book and organize driving lessons online.
  + Track user progress for both studying and driving lessons so they know how they’re doing.
  + Make sure everything works smoothly on a computer, phone, or tablet.
  + Keep user data secure and protected, like passwords and lesson schedules.
  + Be easy to use so people of all skill levels can figure it out quickly.

## 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 must run smoothly as a web-based and mobile application.
* System updates should occur seamlessly without disrupting user activities.

#### 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, MacOS, Android, and iOS.
* Backend tools should include a cloud-based database to support the application.

#### 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 user must have a unique identifier.
* Input validation should ensure case-sensitivity for passwords.
* Admin notifications should be triggered when critical errors occur.

#### 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?*

* Changes to user roles, accounts, and lesson packages must be manageable without requiring code changes.
* IT admins should have privileged access to modify the system configurations 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?*

* Two-factor authentication for user logins.
* Secure data exchange through encrypted connections.
* Account lockout after multiple failed login attempts.
* Automated password reset options for users.

### 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 provide:**
* Secure account creation and login for users.
* A scheduling feature for booking driving lessons.
* Online study materials and practice exams with progress tracking.
* A role-based access system for IT, management, and secretarial staff.
* Tracking of reservations, modifications, and cancellations.
* Notification functionality for DMV updates.
* Activity reports to monitor user interactions.

### 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.)?*

* **Different users:**
  + **Liam (Owner):** Dashboard with business analytics and package management.
  + **Ian (IT Officer):** Admin access to manage user accounts and system configurations.
  + **Secretary:** Appointment management tools.
  + **Customers:** Access to study materials, practice tests, and lesson scheduling.
* **Interface needs:**
  + Web and mobile interface compatibility.
  + Clean layout with designated sections for user progress, contact information, and scheduling.

### 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?*

* Users will have access to stable internet connections.
* Customers will primarily use the system on web browsers and mobile apps.
* DMV will provide timely updates for 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?*

* Limited budget for initial development, which restricts advanced customization features.
* Potential delays in DMV updates that may affect the system’s content.
* Dependency on cloud services for data storage and security.

### 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.*

