# 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 an online system for DriverPass that helps customers prepare for their driving exams through online classes, practice tests, and on-the-road training.
* DriverPass aims to reduce driving test failure rates by offering flexible, accessible training packages.
* The system must support multiple user types (admin, IT, secretary, customer) with distinct functionality and access levels.

### 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?*

* The current issue is that most students study outdated materials and fail their DMV driving tests.
* DriverPass wants to offer a better learning experience through:
  + Online test prep
  + In-person lessons
  + Reservation management
  + Cloud-based access and data storage
* System components:
  + Web interface
  + Online scheduling and package management
  + User account and role management
  + Driver/car scheduling logic
  + DMV data update notifications
  + Reporting and audit trail features

### 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:
  + Allow students to register, select packages, and schedule lessons online
  + Provide online access to study materials and test history
  + Allow secretaries to manage student information and lesson bookings
  + Let IT staff manage users and access rights
  + Track and log all user actions for auditing
  + Be accessible via any modern browser or mobile device
  + Notify admins when DMV updates occur

## 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?*

* Must be available 24/7
* Designed for web access via desktop, tablet, or mobile
* Load time for any page or action must be <2 seconds
* Weekly backups and system maintenance

#### 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?*

* Cloud-based (e.g., AWS, Azure)
* Compatible with all major OS (Windows, macOS, Linux)
* Requires SQL database backend
* Frontend must be browser-based with mobile responsiveness

#### 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?*

* Role-based access enforcement
* Case-sensitive login and form validation
* All actions logged with user ID and timestamp
* Activity audit trail must be downloadable

#### 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?*

* Packages can be enabled/disabled without code changes
* User accounts manageable by IT via dashboard
* DMV content updates applied without downtime
* Compatible with future API integrations

#### 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?*

* Password reset functionality for users
* Account lockout after multiple failed login attempts
* Admin override for blocking or reactivating users
* HTTPS encryption for all data transmission
* Encrypted storage for user and payment data

### 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 users to register and create accounts.
* The system shall allow users to select a training package.
* The system shall allow users to schedule, reschedule, or cancel lessons.
* The system shall allow secretaries to manage appointments and student records.
* The system shall store and display test results and lesson progress.
* The system shall notify users and admins of changes or updates.
* The system shall track driver assignments and vehicle availability.
* The system shall allow IT to manage user accounts and access.
* The system shall produce audit and activity reports on demand.
* The system shall allow DMV to push updated policy or test content.

### 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.)?*

* Users: Students, Secretaries, Admin (Owner), IT Officer
* Interface Requirements:
  + Students: Register, choose packages, take tests, schedule lessons
  + Secretaries: Register students, manage appointments, access reports
  + Admin/Owner: Access activity logs, monitor business performance, disable packages
  + IT Officer: Reset passwords, block users, manage system roles
* Mobile and desktop-friendly browser access required
* Interface must be clean, intuitive, and role-specific

### 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?*

* Students have reliable internet access
* Payment gateway integration is handled externally
* DMV updates are received via API or email
* System will only support English at launch
* User training will be provided

### 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?*

* Modifying packages requires developer assistance
* Only web-based access (no mobile apps)
* Small IT team limits real-time customer support
* Limited budget means third-party integrations (like DMV) may be minimal at launch

### 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.