# CS 255 Business Requirements Document Template

**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?*

* DriverPass wants to provide a better way for students to prepare for their DMV driving test.
* The system should allow students to register for in-person driving lessons and access online study materials.
* The system should support lesson scheduling, account management, driver assignments, and training progress tracking.

### 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?*

* Many people are failing their driving test because of poor preparation.
* DriverPass wants to solve this by offering structured, professional training using both online and in-person options.
* The system should include online practice tests, progress tracking, lesson reservations, driver assignments, and cloud access to data.

### 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?*

* Allow customers to create accounts and reset passwords automatically.
* Let students schedule, modify, and cancel lessons online.
* Support three different training packages, with flexible enable or disable options.
* Track and display lesson details including time, driver, and comments.
* Provide secure login with role-based access for different users.
* Ensure accurate recordkeeping for who made, changed, or canceled reservations.
* Allow exporting data for offline use in Excel.
* Enable updates from the DMV to keep training material current.
* Deliver the service through a web-based cloud platform with minimal technical effort from staff.

## 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 be accessible via web browser on desktop and mobile.
* It should be responsive and load pages within 2 seconds.
* Data should sync with the server when online and allow offline viewing of reports.

#### 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?*

* Web-based platform running on Windows and macOS.
* Backend should use a relational database such as MySQL or PostgreSQL.
* Should integrate with Excel for offline report downloads.

#### 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?*

* User access is managed by role (admin, IT, secretary, student).
* Usernames and passwords are case-sensitive.
* System should notify admin of suspicious activity or data inconsistencies.

#### 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?*

* Admin can enable or disable training packages without code changes.
* IT officer can reset passwords and block users.
* System should adapt to cloud provider updates automatically.

#### 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?*

* Login requires a secure username and password.
* Data exchange should use HTTPS for encryption.
* Account locks temporarily after multiple failed login attempts.
* Password reset is available through email or security questions.

### 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 create and manage accounts.
* The system shall validate user credentials when logging in.
* The system shall enable customers to schedule, modify, and cancel lessons.
* The system shall allow admin to manage user access and reset passwords.
* The system shall track lesson reservations and changes by user and timestamp.
* The system shall generate and export activity and performance reports.
* The system shall receive DMV updates and notify admins.
* The system shall show lesson history, driver notes, and test progress for each student.

### 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 will run in a browser and support mobile devices.
* Admin interface includes tools to manage users, packages, and system updates.
* Students will use it to view progress, schedule lessons, and take practice tests.
* Secretaries can input student data, schedule lessons, and generate reports.
* The design should be user-friendly with forms, tables, and status indicators.

### 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 internet access and modern web browsers.
* Admin and IT users have basic technical skills to manage settings.
* System will use cloud hosting for uptime and scalability.
* Data storage complies with privacy laws but is not deeply covered yet.

### 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?*

* Customization of training packages requires developer help.
* DMV integration depends on their willingness and technical ability to share updates.
* The system will not support offline data editing due to risk of data conflicts.
* Timeline and resources may limit additional features in this first release.

### Gantt Chart

