# 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?*

* DriverPass is the client, a company focused on helping students prepare for DMV driving tests.
* The project’s purpose is to design a system that:
* Provides online classes, practice exams, and on-the-road training to improve student pass rates.
* Gives DriverPass staff tools to manage lessons, track reservations, and generate activity reports.
* Allows secure access to data from anywhere, supporting both business operations and student needs.

### 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 identified a problem with many students failing DMV tests and wants a system to improve training outcomes.
* The system must:
  + Allow access to data from anywhere (online and offline for reports).
  + Support modifications only when online to prevent data duplication.
  + Provide role-based security, including full account control for the IT officer (resetting/blocking accounts).
  + Track all changes to records (reservations, cancellations, modifications) with activity reports.
  + Enable customers to make, cancel, and modify reservations online or through the secretary.
  + Manage schedules across multiple drivers, cars, and lesson times.
  + Offer three training packages (6, 8, or 12 hours) and allow administrators to disable packages if needed.
  + Support registration via phone or online, collecting student info (name, address, phone, state, credit card details, pickup/drop-off locations).
  + Provide an automatic password reset feature.
  + Stay compliant with DMV requirements by connecting to DMV updates (rules, policies, test questions).
  + Run on the cloud for easier backup and security management.
  + Include a clear, user-friendly interface as requested by DriverPass.

### 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?*

* Provide students with access to online classes, practice exams, and test progress tracking.
* Allow customers to schedule driving lessons and training packages easily.
* Enable staff (secretary, IT officer, owner) to manage appointments, accounts, and system data securely.
* Generate reports on student progress, reservations, and activity logs.
* Maintain security through role-based access, password resets, and data tracking.
* Ensure compliance by integrating DMV updates automatically.
* Reduce scheduling conflicts and support flexible lesson management across drivers and cars.
* Measure success by improved student DMV pass rates, accurate reservation handling, and efficient system performance.

## 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 run on cloud, accessible via browser/mobile
* Must handle multiple users (students, secretary, IT, admin) simultaneously
* Should generate reports quickly and support data download (e.g., Excel)

#### 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 web platform.
* Backend requires a secure database for user data and scheduling.
* Accessible via modern web browsers (Chrome, Firefox, Safari, Edge).

#### 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 authentication required for access.
* Track and log all changes (scheduling, cancellations, modifications).
* Notify admin in case of errors or unusual activity.

#### 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?*

* Admins should disable/enable training packages without developer support.
* Future features should be easy to add (scalable system).

#### 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?*

* Secure login with password reset.
* Protect credit card info and personal data.
* Block account after multiple failed login attempts.
* Secure data exchange between client/server.

### 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 logged in.
* The system shall allow students to register and input personal/payment information.
* The system shall allow students to schedule, cancel, and modity appointments online.
* The system shall track drivers, cars, and schedules for each appointment.
* The system shall provide online courses and practice tests.
* The system shall allow IT/Admin to reset and block accounts.
* The system shall track and report all modifications (who, when, what).
* The system shall integrate DMV updates into the course content.
* The system shall generate downloadable reports.

### 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, Admin (Liam), IT Officer (Ian), Secretary, Drivers.
* Students: register, schedule lessons, access tests, reset password.
* Admin: view data, disable/enable packages, generate reports.
* IT: manage accounts, reset passwords, ensure security.
* Secretary: input student data, schedule lessons by phone.
* Must be browser and mobile friendly with a clean design.

### 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 have reliable internet access.
* DMV will provide timely updates on rules and requirements.
* Cloud provider will manage backups and security.

### 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?*

* Customers must be online to make changes (no offline modifications).
* Initial release cannot add/remove modules without a developer.
* Limited by DriverPass’s budget and time frame.

### 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 graph with a grid and a row of squares

Description automatically generated with medium confidence