# 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 client is DriverPass, and they want a system that helps students get ready for their DMV driving tests
* The system should let students take online practice exams, sign up for the on-the-road driving lessons, and access study materials.
* The goal is to give students better preparation and increase the chances that they pass their driving tests.

### 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 notices that many people fail their DMV driving tests because they aren’t prepared enough.
* The company wants to fix this problem by giving students different training options, like online classes, practice tests, and behind the wheel driving packages.
* The system needs to be able to handle:
  + Student accounts with secure login and password resets.
  + Lesson scheduling where students can book, cancel, or change their appointments.
  + Package options that can be turned on or off depending on what DriverPass is offering.
  + Activity tracking, so reports can show who made or changed reservations.
  + Online access to all the information, plus the ability to make sure the materials and tests match DMV requirements.

### 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:
  + Let students register, log in, and manage their appointments online.
  + Give students access to online classes, practice tests, and show their progress (tests completed, scores, pass/fail).
  + Allow secretaries to schedule appointments by phone or in person for customers.
  + Allow IT/admin staff to reset passwords, block users, and manage accounts
  + Make it possible for DriverPass to enable or disable training packages when needed.
  + Keep track of activity logs and generate reports.
  + Provide cloud access that is secure and reliable.
  + Receive updates from the DMV when policies or test questions change.
* Measurable goals:
  + Students can schedule or change a lesson quickly and easily (less than 5 minutes)
  + Reports can be exported into Excel or another format for offline use
  + Password rest works automatically without having to call support.
  + The system will log every action tied to appointments so its clear who did what.

## 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 shall be web-based and cloud-hosted, accessible 24/7.
* The system shall support multiple users simultaneously with minimal lag.
* Pages and reports should load within 2–3 seconds.
* Practice test content should be reviewed and updated regularly based on DMV changes

#### 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 shall run on Windows, Mac, and mobile operating systems via web browsers.
* The back end will require a secure relational database for storing user data, reservations, and test results.
* Cloud hosting is required to handle backups and reduce security management burden for DriverPass staff.

#### 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 will be identified by a unique login ID and password.
* Inputs (such as reservation times or test answers) must be validated to prevent errors.
* The system shall log and track all activities (who created, modified, or canceled reservations) for reporting.
* The system shall notify the admin if issues or inconsistencies 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?*

* Admins should be able to add, modify, or remove users without changing system code.
* IT staff should be able to disable packages or features when no longer offered.
* The system must be flexible enough to adapt to browser updates and DMV rule changes.
* IT officers will need full administrative access for troubleshooting and updates.

#### 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 shall log in with secure credentials.
* Data exchanges shall be encrypted (HTTPS/SSL).
* Accounts shall temporarily lock after multiple failed login attempts to prevent brute force attacks.
* Users who forget their password will be able to reset it automatically via a secure process

### 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 students to register and create secure accounts.
* The system shall allow students to take online practice exams.
* The system shall provide instant results and feedback on exams
* The system shall allow students to schedule, cancel, and modify reservations for driving lessons.
* The system shall allow instructors to view schedules, assigned cars, and submit lesson notes.
* The system shall allow the secretary to input student information and book lessons for phone/office requests.
* The system shall allow administrators to add, update, or disable training packages.
* The system shall integrate DMV updates into online tests.
* The system shall generate reports showing activity history, reservations, and test progress

### 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.)?*

* **Students:** Take practice exams, view results and status, schedule lessons, and track progress.
* **Instructors:** View lesson schedules, driver notes, and manage lesson reports.
* **Secretary:** Input student information, manage appointments by phone or office.
* **Admin/IT:** Manage accounts, reset passwords, disable packages, and update exams.
* Interfaces must be web-based, simple to navigate, and compatible with both desktop and mobile browsers.

### 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 will have reliable internet access.
* Users will have access to either a computer or mobile device.
* DMV will provide timely updates to rules, policies, and exam content.
* Payment processing will follow standard online payment procedures securely.

### 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 and resources may restrict advanced customization of packages at launch.
* DMV integration depends on DMV system availability and cooperation.
* The project timeline restricts scope to essential features first, with possible future expansion.
* Additional technical staff may be required for long-term maintenance.

### 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 diagram of a project

AI-generated content may be incorrect.