# 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?*

* Client is DriverPass.
* This system is intended to help students practice for their written and driving exams.
* System should be available from a web browser and allow the student to track their testing progress and schedule driving lessons.

### 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?*

* Currently, students are unprepared for their driving tests at the DMV and fail. This system should provide them with the resources in order to succeed.
* System Components:
  + Users of different security levels
  + Practice exams
  + Driving lessons
  + Course Packages.
  + User Information.

### 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?*

* Overall System:
  + System data should be accessible from any device.
  + Connect to DMV with notifications for updates.
  + Reports for various data should be able to be downloaded for offline use.
  + Record creation and modification should be tracked, (what was created/modified, who created/modified).
* Users of different security levels
  + Admin – Create, modify, and remove Employee accounts.
  + Manager – Maintain the system, modify elements.
  + Secretary – Create, modify, and remove customer accounts. Create, modify, and cancel appointments.
  + Customer - Create, modify, and cancel their own appointments. Create, modify, and disable their own account. Reset password.
* Practice Exams
  + Students should be able to view, take, see automatic grades and retake.
  + Overall progress displayed on user page.
* Driving Lessons
  + Scheduled by customer or secretary.
  + Include information as to driving instructor, time scheduled, and car to be driven.
  + Lesson information as well as driver notes displayed on user page.
* Course Packages
  + Currently, three different packages. Customers should be able to pick one.
    - Package One: Six hours in a car with a trainer
    - Package Two: Eight hours in a car with a trainer and an in-person lesson where we explain the DMV rules and policies
    - Package Three: Twelve hours in a car with a trainer, an in-person lesson where we explain the DMV rules and policies—plus access to our online class with all the content and material. The online class also includes practice tests.
  + Should be able to be disabled by Admin role when necessary.
* User Information
  + Collected by phone. (First name, last name, address, phone number, state, and their credit card number, expiration date, and security code)
  + Displayed on user page.

## 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?*

* Web-based
* Each page should be loaded within 2 seconds
* System should be updated every month for 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?*

* Database for user information and scheduling.
* Run on Windows Server.

#### 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?*

* Destingiush between users by looking at user role for each login.
* Username is not case sensitive.
* Password is case sensitive.
* System should inform the admin when sensitive information is accessed by someone with the wrong role.

#### 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 users are available within the system. No code changes necessary.
* IT admin needs access to all system functions.
* System will work with browser 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?*

* Username and password for each user.
* Temporary account lockout after 5 login attempts.
* MFA for self service password reset. One authentication method required for reset.
* Alert admin on 5 failed login attempts.

### 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 lock out an account after 5 failed login attempts.
* The system shall be accessible from a web browser.
* The system shall have case sensitive passwords.
* The system shall be able to handle multiple user logins at one time.

### 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.)?*

* Admin – Create, modify, and remove Employee accounts.
* Secretary – Create, modify, and remove customer accounts. Create, modify, and cancel appointments.
* Customer - Create, modify, and cancel their own appointments. Create, modify, and disable their own account. Reset password.
* Available through browser on desktop.
* Basic features available through browser on mobile.

### 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 internet access.
* User will have an account in the system.

### 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?*

* Internet connection is required.
* Limited features on mobile.

### 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.*

