# CS 255 Business Requirements Document Template

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CS-255 System Analysis and Design

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 provide a convenient online service to users who are working towards their driving test.
* The client wants an online system that they can use to schedule and coordinate with the user to set appointments for their driving sessions based on their selection.

### 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 wants to be able create comprehensive training for the users to prepare them for their DMV driving tests. DriverPass wanted to fix the high failure rate of the students taking the driving test for the first time. The components needed are customer account management, a web application, security functions, storage services, and the ability to integrate DMV policy updates.

### 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 provide them with training, both on the road and knowledge based.
* Allow access to personal data both online and offline and reset their passwords.
* Allow access from any computer or smart phone.
* Display the different packages and allow for them to be purchased and removed by the administrator when full.
* Notifications when the DMV has changed any information or standard.
* The system should allow the users to create appointments and schedules with drivers.
* The system should be able to ensure that all systems are up to date and have good data flow through the system.

## 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 client wants the system to be run as a web-based application in the cloud.
* The system should run fast enough to provide real-time or near-real-time interactions.
* The system should be updated regularly to ensure security and to ensure that the system is updated with the latest DMV information.

#### 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 platform that the system will run on will depend on the target audience as well as the compatibility with other systems. I would recommend being cross-platform, this will ensure that we reach a wider range of users.
* The back end will require a database for storing and managing data and other back-end tools depending on the system. We would want cloud-based Hosting services as well.

#### 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?*

* There will be different users with login requirements, which would be case-sensitive. Each user will have a security role that will limit what they can access.
* The system should inform the admin if any page is accessed by someone without the designated security 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?*

* I can make changes such as resetting passwords and removing certain information from the users without changing code.
* IT admins will have full access to the cloud or the system’s backend to maintain the system, apply updates, and make sure that the system adapted to the platform 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?*

* The user will login using their Username and password, with a two-factor Authentication.
* To secure the connection we would use HTTPS to make sure that data exchange between the client and the server is encrypted.
* If the user forgets their password, they will need to contact an administrator to reset the password.

### 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 the change of personal information like addresses and appointments if needed.
* The system shall maintain a connection during user sessions.
* The system shall implement role-based access to restrict features based on user roles.
* The system shall provide system backups to prevent data loss in case of system failure.

### 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 needs to be easily navigable, that feels responsive and helps users access their tasks quickly and efficiently while also providing security by protecting the user data and privacy.
* The different users for the interface would be the Administrators who will need to monitor the system’s health and user accounts and be able to configure settings. The second user would be the regular users, who will be able to access content and input data while communicating with others. Lastly a guest will be able to view information and purchase items without being able to access everything fully.

### 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?*

* Some things that where not specifically addressed above are users who do not have the ability to access technology, or how it will adapt to users at different education levels or familiarity with technology.
* We assume that the administrators will maintain the users’ accounts.
* We assume that no user has any disability and can follow the prompts easily.

### 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?*

* The system needs updated when you add or remove modules for a future release.
* The system is limited by the DMV guidelines which could affect the system if the DMV is not updating regularly.
* Limitations with time is that it ranges from 22-Jan to 10-May which may impact the features that can be developed and implemented within that time.

### Gantt Chart

*Please include a screenshot of the GANTT chart that you created with Lucid chart. Be sure to check that it meets the plan described by the characters in the interview.*

