# 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 purpose of this project is to facilitate potential drivers with training to ensure they pass their DMV License test.
* DriverPass, the client, wants an app that users can use to enhance their driving skills so that they will be more likely to pass a License test.

### 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 the system to allow users to sign up for packages that will allow an instructor to be scheduled to provide them with training. They see a void in drivers training and see an opportunity to capitalize on reducing the rate of driving test failures.
* There will need to be a user facing component to schedule and add information concerning themselves, an administrative component for the highest level employees to edit records and access to the system, and an intake component for the secretary in case the users want to sign up over the phone where the secretary can add the necessary information to the system.
* There will also need to be a component that connects to the DMV to alert the company if any changes or updates are made to various policies and procedures.

### 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, when completed, should allow for user sign ups online, allow users to input and edit information on themselves, and allow for password resets in case the user loses track of their password.
* Users will be able to sign up for three initial packages based on the level of training they wish to receive, and then they will be able to schedule a pick up for a driving instructor to pick them up for training. After two hours of training has been completed, the user will also indicate what their drop-off location will be.
* Users and employees will also have access to a page that will output various information pertinent to their training, such as test progress and passing/failing status, driver notes, and driver and student photos.
* The system should also have a method to add/edit/remove employee access available to high level employees.

## 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 should be primarily web-based or cloud-based with access for both mobile and PC.
* The system should include updates shortly after the DMV issues any updates of their own.
* The system should allow for quick information edits for customers and their information, as well as quick access to setting appointments and viewing materials.

#### 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?*

* System should support multiple platforms being web-based, this includes Windows, iOS, and Android.
* Database should be used for storing customer information, scheduling details, as well as training content.

#### 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?*

* Having users tied to their email address should facilitate in ensuring unique identifiers are present throughout the system.
* Passwords must be case-sensitive to enhance security by creating stronger passwords.
* The system should inform an admin if there are issues with system not recognizing a correct password, or if an incorrect password is used too many times as to warrant a fraud investigation.

#### 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?*

* The system should allow for admins to add/remove/modify to user data without changing the code.
* This information changes should not occur without the consent of the user, save for special cases such as death, membership cancellation, or training completion.
* Having the system cloud-based can mitigate the need for code updates with platform updates. We just need to ensure that it is able to run on the major current standards of web browsers.
* IT admins need access for compliance, convenience, and cost reasons.

#### 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 (user’s email) and password will be required for access.
* Ensuring proper security protocols and procedures are implemented, such as encryption and compatibility with standards such as HTTPS, can help mitigate security threats.
* The system should allow for only a determined amount of tries for the password. Once that limit is reached, the account will be disabled.
* The admin will receive notification of this brute force attempt and account disabling as well.
* If a user forgot their password, the system should send a link to reset the password to the email address linked to the user’s account.

### 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 validate the user’s module subscription.
* The system shall provide access to only the content allowed for the module the user has subscribed to.
* The system shall grade tests taken by the user.
* The system shall notify admins of updates on the system and its status.

### 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.)?*

* Interface should be interactable via mobile and PC browser.
* Students will need to be able to edit their information, schedule appointments, access learning content, and participate in tests.
* Admin will need to have access to editing all user information, access to reports based on the performance of the system, and other high level functions.
* The secretary needs access to the appointment scheduler to set appointments on behalf of students.
* Login credentials must be validated for any user to have access to the interface.

### 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 access to internet connectivity.
* User has access to an email account.
* Users have access to computers and/or smartphones.
* The modules present at the start will be sufficient for users and their requirements.

### 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?*

* There are only ten cars, limiting the availability of appointments to students.
* There are only three modules available, reducing the choice students have in what they can select.
* We are limited to 12 hours of business operation for car availability.

### 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.*

