# 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 is to make a system that works from anywhere, online or offline, that doesn’t duplicate data on different servers for our client.
* Our client is Liam the owner of “DriverPass”.
* The system should be able to be used online and offline and allow for report downloads when offline. Activity reports and accounts should also be included in the system.

### 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 make reservations for learning sessions, match a user with an instructor on the system, and also show packages that can be removed when full if needed.
* The problem needing fixing is a way to keep their information and records and allow users to make reservations while also providing information to the user of 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?*

* The system should allow customers to make appointments online, receive information from the system, and be able to use “forgot password” if needed. The system should also have updated information from the DMV website to ensure they are working with up-to-date information. The system should also have the ability to be viewed online and also offline.

## 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?*

* This system will run on a web-based client that is suitable for most browsers.
* The system should perform as a regular website is expected to perform. Quick loading times and images should load in instantly.
* The system should constantly be updated depending on any new DMV information and the number of users.

#### 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 should be somewhat universal. Allowing for any OS to run the website as long as they have browser that can handle the site.
* There should in fact be a database for the recording of the driving lessons information, things like who the user was, who the instructor was, and info on the session itself.

#### 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 have a set of features they can access depending on their role in the company. A driver will only have access to information on their reservation while the owner will be able to see all reservations and specifics that only the owner should see. The input should be case sensitive in order to assure good security.
* The system admin should be informed of any errors regarding security within the system, any new users, and any new reservations. This is so the owner can keep track of what is going on within the system.

#### 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 user should be allowed to be made without modifying code because there will likely be many changes to users. Whether it’s a deleted account, new password, or a new account.
* The system should be able to perform updates accordingly as new changes are made. These updates should be made at hours of low site traffic to assure users are not made aware. The IT admin should be allowed to see much of the information as long as it does not include personal information of users like card numbers, addresses, etc.

#### 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 should be required to have a username or email and password to log into the system.
* To secure the data exchange we can ensure our system is secure and ensure the log in process is encrypted.
* In the case of a hacking event the account should be closed for review and the user should be notified immediately via email.
* If the user forgets their password, then there should be a “forgot password” icon that allows the user to confirm their email to then receive a link to change their password. This link should also be encrypted.

### 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 info when logging in
* The system shall show the dedicated home page
* The system shall allow user to choose which link to follow
* The system shall open reservation creation page
* The system shall allow user to input information
* The system shall send information to owner and assign driver to user
* The system shall open testing page
* The system shall allow user to choose test
* The system shall direct user to testing link
* The system shall record user input and output which input is correct.
* The system shall update home page accordingly with new info from DMV page
* The system shall allow user to change password by sending link to user email

### 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 should show the user a home page with links to different options like making a reservation, making an account, and taking tests on the page. It should also have an updated page with any new information from the DMV. Each user will need to be able to go through these links and be able to interact with them. The user will be able to interact with the interface depending on the device. A mobile browser will mean allowing for reorganization of the page to show everything correctly.

### 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?*

* I am assuming that each device will have a similar resolution which allows for only one setting of the mobile browser page organization.

### 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 limitation I see is keeping the system constantly updated and even being able to store the data for offline use for the owner. Limitations that I would have would be the time and budget.

### 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.*

