# 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 provide practice for customers to be able to pass the DMV driving test. The client, DriverPass, is a company owned by Liam and the IT officer Ian. DriverPass’s main objective is for the system to be able to provide tests and on-the-road training to customers. This system will give the customers an advantage in passing the DMV 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 wants the system to be able to provide tests and schedule on-the-road training. The problem that DriverPass wants to tackle is the large number of people failing the driving test. The system needs to be able to schedule driving times and track students’ progress in driving and in preparation tests. The components needed for the system are a database for information storage, and a user interface for adding and removing users. The admin needs different privileges than regular users, and the secretary needs different privileges too.

### 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 be able to set up times that work for the student, instructor, and vehicle. This can be measured by a test of seeing if the times are all available and when a time is reserved all of the times are made “unavailable”. The system should also track the customer’s knowledge in different areas. This will be measured by showing the online tests taken with the test name, time taken, score, and status. Status could be not taken, in progress, failed, or passed.

## 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 needs to run off of the web, preferably off the cloud. The system should be updated every time the DMV updates their rules so the new rules, policies, and sample questions will be correct. The system should be fast enough that users do not experience problems.

#### 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?*

* I would say the system should run on Windows, Linux, and MacOS computers over the web. Perhaps the server side should run on Linux as Linux is better with PHP, SQL, and stuff like that. The backend will need tools for databases like SQL. The backend is the “cloud” and needs to handle the security and the backup.

#### 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?*

* The different users on the system will be differentiated by different usernames and passwords. The input should be case sensitive to give a wider selection of usernames and passwords. The system should inform the admin of any changes to a profile. The admin should be notified of who made a reservation, who canceled it, and who modified it last.

#### 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?*

* Users should be able to be added without changing the code. The system will need to adapt to platform updates with a developer. They will need to customize the packages offered removing some or adding new ones. The IT admin will have full access and will be able to remove or add users and employees and change anyone other than the boss’s data.

#### 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 users will have to enter a username and password to login. SSL will be used over the network to establish two-way authentication. This will secure the connection. If the user enters the wrong password 3 times in a row the website should lock the user out of the website. Then the website will require the user change their password before they can log in again. If the user forgets their password, they can reset it by getting a code sent to their phone or email.

### 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 the user credentials when logging in.
* The system shall lock the account after 3 unsuccessful login attempts.
* The system shall allow the user to reset their password with an email code.
* The system shall track available appointments times and reserved times.
* The system shall allow the user to book appointments when there are available times, cars, and drivers.
* The system shall inform the admin when users update their information.
* The system shall let users change their information.
* The system shall let the user take tests and store their test results.
* The system shall let the secretary enter appointments for any user.
* The system shall offer different driver packages.

### 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 user interface will show the logo at the top of each page. The top left area will show the user’s online test progress. The bottom left will show the user what the driver took notes on for the user to know how to improve. The top right will show the user’s information. The bottom right will have a picture of the student and of the instructor driver they are paired with. They should also have a “special needs” note section. The user will interface with this over a web page so they can access it from any device that has internet. The different users for the interface will be admin, drivers, and students.

### 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 would assume all of the requirements will be able to be produced within the budget. The customers will have access to the internet. The customers will have an email. The DMV will update the admin so they can update the questions.

### 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?*

* We only have 15 weeks to complete because it has to done before the busy vacation season. We have no control over the DMV. The website must be written to work on all browsers. There is no budget, so it is an estimate. We only have so many developers.

### Gantt Chart

Chart

Description automatically generated*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.*