# 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?*

* DriverPass, owned by Liam, is looking to satisfy a need for better driver training for DMV tests. He had noticed that are very few tools for assisting drivers in passing the DMV test.
* DriverPass has requested to implement online classes to help customers learn with practice tests, and offer the ability to take on-the-road training as well.

### 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 is looking to develop a system to assist and teach customers that have issues with failing their DMV tests.
* They are looking to remedy this by providing online courses, practice exams, and on-the-road training.
* Their system needs to be able to access data from online servers as long as a connection is present.
* The system will need to have proper security measures, including being able to have different levels of access, such as administrative rights to the owner, or surface level access for customers.
* The system will also need to be able to place and track reservations for driving lessons, as well as be able to cancel or modify existing
* This also needs to be able to be performed both with the application from the end user, as well as in office by the secretary via phone or in person.
* The driving appointments need to be separated into three packages for the customer to choose from.

### 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 will need to be a fully functional website, to allow customers to take practice tests and online courses.
* The system must also allow customers to book in person driving tests, both over the phone, in person, and online.
* The tests must be able to able to be tracked online, as well as progression and completion.
* The DriverPass Driver needs to be able to add notes and details for the lessons performed by the customers.
* The Driver and customer need to be able to be tracked; car, time, and Driver/Customer
* The Customer needs to be able to add/update their information to their profile/account, as well as set a pickup and drop-off point.
* The System needs to be able to be checked against current DMV rules, to ensure that the tests/courses are up to date.

## 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 be web based, allow users to access website and update details.
* The system should be able to handle traffic without issue, update and display details.
* The system will be updated as per the needs of the client, either software updates for existing issues or new features added later.

#### 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 can run on Windows, Linux ideally for a cloud environment.
* The system would be using the cloud environment to handle the incoming traffic and user input, and a database backend.

#### 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 users need to be able to create accounts with a unique username and secure password when logging in.
* The input for the username can be non-case sensitive, however the password creation should be limited to several characters at a minimum and also be case sensitive for better security.
* If a user attempts to login too many times, or has issues with remembering their login name and password, the System administrators should be notified of the issue.

#### 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 be able to make changes to users without changing code. Administrative access, such as the secretary will be able to modify these values.
* The system currently will not need to be adapted to platform updates until the DriverPass owner wishes to push new features. Only now the system will at most need updates for security or bug fixes.
* The IT administrator must have access to all features of the system, it order to facilitate changes that may be required.

#### 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 require a username and password to access the system. The username will not be case sensitive, however the password will be, with a minimum character limit as well as a combination of numbers and letters.
* When creating an account, the user must specify an email address and additionally confirm via email that they are the account holder.
* The cloud environment will be the primary security factor for the data exchange between the client and server, using encryption to ensure secure data transfers.
* The system will block access to the specific account(s) if attempting to brute force it for multiple failed attempts.
* If a user forgets their password, they can follow a password reset process following their registration email used.

### 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 systems shall need to validate user login credentials
* The system shall provide classes and practice tests
* The system shall offer multiple driving packages for the customer to choose from
* The system shall book reservations and notify the customer for driving lessons
* The system shall notify the instructors about scheduled lessons and completed tests
* The system shall show the completed tests and feedback to the customer
* The system shall provide varying levels of access based upon the user
* The system shall allow full access to all systems for the administrator and IT support
* The system shall allow for modification of existing reservations by the customer, or secretary
* The system shall be written to be efficient, cloud based, and have potential for later expansions

### 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 be designed to allow customers to login and view information easily
* The interface should be designed to work on online and mobile devices connected to the internet
* The interface should be designed to display all data relevant to each different type of user

### 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?*

* The owner had not specifically stated that he desired further functionality or features to implement yet, so assuming to design for potential further expanded features
* The assumption is made that the project will run on modern handheld devices as well as modern PC’s
* The assumption is made that the owner has laid out all current features they would like implemented

### 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 limitations would be the five month period designated
* Another limitation would be the budget. A specific budget was not specified in the requirements gathering phase
* Another potential limitation would be employees that are currently on vacation

### 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.*

A screenshot of a calendar

Description automatically generated