# 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?*

* To build a system that will customers to be able to take online classes, practice tests, and to be provided with the option for on-the-road training for the client DriverPass under the ownership of Liam.

### 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?*

* The problem DriverPass wants to fix is the large number of people failing their driving tests at the DMV by giving them the option to take online classes, online tests, and to schedule on-the-road driving training. A website will need to be created, a user database will need to be created and managed, and the data will need to be stored over cloud services.

### 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?*

* DriverPass wants the system to be able to:
  + Allow customers to make reservations/schedule online classes, on-the-road training, and take online practice tests.
  + Allow the company drivers to view their schedules, customers,
  + Allow the company owner (Liam) and the secretary to access online data from any computer or mobile device so that they can download reports and information can be worked on at home or in the office.
  + Allow customers to register, manage, and view user accounts under a username and password
  + Allow the customer to automatically reset their password
  + Allow the company owner to have full access over all accounts so that he can reset a customer’s password or needs to let go of someone and block their company access.
  + Allow the company owner to track users so that he knows who made, cancelled, or modified reservations.
  + Allow the secretary to have partial access to customer’s accounts so that she can schedule, cancel, or modify appointments.
  + Allow the company owner to print activity reports on reservation updates
  + Have options to select the below packages on the website:
    - Package One: Six hours in a car with a trainer.
    - Package Two: Eight hours in a car with a trainer and an in-person lesson where we explain the DMV rules and policies.
    - Package Three: Twelve hours in a car with a trainer, an in-person lesson where we explain the DMV rules and policies—plus access to our online class with all the content and material. The online class also includes practice tests.
  + Allow the company owner to be able to disable if he doesn’t want anyone to be able to select it and re-enable the packages when he does.
  + Have the customer database and user accounts that displays the customer’s first name, last name, address, phone number, state, credit card number, credit card expiration date, credit card security code.
  + Have the customer database and user accounts display the on-the-road driving lesson pick up location and drop off location (which should be the same as the pick up location).
  + Have an option for the DMV to send updated on test and practice requirements (including new rules, policies, or sample questions) to the company owner and secretary via notifications

## 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.*

* Allow the company owner and the secretary to access online data from any computer or mobile device so that they can download reports and information can be worked on at home or in the office so the company can be managed anywhere with internet access
* Allow the company owner to have full access over all accounts
* Allow the secretary to have partial access to customer’s accounts so that the secretary can schedule, cancel, or modify appointments
* Have the customer database and user accounts that displays the customer’s first name, last name, address, phone number, state, credit card number, credit card expiration date, credit card security code
* Have the customer database and user accounts display the on-the-road driving lesson pick up location, times, and drop off location (which should be the same as the pick up location)
* Have an option for the DMV to send updated on test and practice requirements (including new rules, policies, or sample questions) to the company owner and secretary via notifications

#### 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 run as a website on a cloud-based server. The system should be fast enough that it’s many users can operate it without any problems and should automatically updated for all users if the company adds any new functions or features to the website.

#### 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?*

* This system should be run on the Linux Operating Platform. Because this system will be run using a cloud based server they will manage all the security. This will also take care of the databases on the back end because they will also be stored on the cloud based server.

#### 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 their own account protected by a username, password, and individual email. The username and password will be case sensitive for extra security. When a user cannot log into their account the system will provide them with the option to reach out to the company owner to have their password reset. They should then receive an email prompting them to create a new password.

#### 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 company owner will be able to make changes to users as well as allow you to remove users from the system without changing code. Platform updates will occur but slowly and systematically as there are needs for updates. The Company Owner and Administrators will be able to remove any former employees from the system who should no longer have access.

#### 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?*

* An email address, username, password, first name, last name, date of birth, and address. Multifactor authentication will be used for log in purposes. The data will be shared between client and server through the cloud. After the user does not correctly enter the username and password correctly after four tries the system will lock them out from logging in for security purposes. At that point, if the user would like to change their password, they will be prompted to enter their email address that is linked to their account. If it is the incorrect email address nothing will be sent. But if it is the correct email address, they will be sent a link to reset and change their password. All customer and employee information will be protected.

### 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.”*

[Insert text]

* Allow customers to make reservations/schedule online classes, on-the-road training, and take online practice tests
* Allow customers to register, manage, and view user accounts under a username and password
* Allow the company owner to be able to reset a customer’s password or block an employee’s company access if he lets them go.
* Allow the company owner to track users so that he knows who made, cancelled, or modified reservations
* Allow the company owner to print activity reports on reservation updates
* Allow the company owner to be able to disable a vacation package if he doesn’t want anyone to be able to select it and re-enable the packages when he does

### 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 has to allow the customer to make reservations for online classes, practice tests, and on the road driving training. Driver pass employees should also be able to access the interface to make changes and make system feature updates when necessary. The user will be able to access the interface with any device multiple devices that have internet access including laptops, desktop computers, and mobile devices.

### 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?*

* It is assumed you will have the necessary employees for the company to provide its services to customers
* It is assumed that you will have the necessary hardware and online connectivity to support the companies need

### 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?*

* No thoughts of customers who speak different languages
* flexibility with on-line classes by having access to pre-recorded and live classes

### 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.*

