# 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 that a client is asking my consulting company to create a system that allows customers to make appointments to receive driver training, online classes, and practice tests all in the hopes of passing their drivers exam. The client is DriverPass with the Owner Liam and his IT officer Ian. DriverPass wants their system to be able to access their information from any location. DriverPass wants the website to have specific roles for the different types of employees and to be able to track what modifications to the system any employee makes. DriverPass also wants customers to make reservations online or over the phone; track driver/instructor to know who is with which customer, choose from 3 driver training packages involving what type of training they desire with the addition of more being added or removed as necessary. DriverPass wants the customer to be able to register themselves onto the website, keep website up to date with changes at DMV, and have the website run off of the cloud. DriverPass will also show the customer their progress on tests and allow customers to leave comments.

### 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 their system to be able to access their information from any location. DriverPass wants their system to help a client access data from anywhere, online as well as offline. DriverPass wants their clients to access data online from any computer or mobile device so that the client can download reports and any information that he can work on from home or during travel. DriverPass wants the website to have specific roles for the different types of employees and to be able to track what modifications to the system any employee makes. DriverPass also wants customers to make reservations online or over the phone; track driver/instructor to know who is with which customer, choose from 3 driver training packages involving what type of training they desire with the addition of more being added or removed as necessary. DriverPass wants the customer to be able to register themselves onto the website, keep website up to date with changes at DMV, and have the website run off of the cloud. DriverPass will also show the customer their progress on tests and allow customers to leave comments. DriverPass wants to fill a void in the market where customers can better prepare themselves for their driving exams. The different components needed for this system are security, tracking of customer requests, the need of a developer/system analyst to help modify the system, an interface that lets the customer be able to see and use everything easily.

### 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 allow any customer that uses this program the ability to register online to then make appointments for driver instruction, online teaching material and free tests to help them pass their driving exam. The measurable tasks that need to be included in the system design to achieve this would be to first register onto the program, then to decide what package best fits the customers needs, then have the customer schedule their appointment, then take additional tests/reading as necessary. Other measurable tasks that need to be included are collecting requirements, create use case diagrams, build activity diagrams for each use case, research user interface designs, build class diagram, build interface, link DB to interface, build business log, as well as testing the system and then finally delivering the system.

## 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 able to run off the web, preferably over the cloud.
* The system needs to be able to run on both the computer and mobile devices.
* The system should be able to keep up with the cloud and be able to run perfectly fine with an abundant amount of users from both computers and mobile devices.
* The system needs to be updated continually due to the fact that the client wants to be able to work both online and offline while at home.
* The system should also be regularly updated when the DMV makes changes. The system should be connected to the DMV and notify DriverPass whenever there is an update.

#### 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 platform the system should run on is Windows due to the fact that Windows is widely used worldwide.
* The system should run off the web, preferably over the cloud.
* The back end requires a database to house all of the customers information. The database needs to keep track of the customer information such as their address and the state they live in, their names and phone numbers, their credit card information such as card number, expiration date and security code.
* The database should house the pickup location and drop-off location the customer desires.

#### 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?*

* Customers will have to register online and create a valid username and password to be able to schedule appointments and participate in practice tests and or a driver’s test.
* The input for customers usernames and passwords should be case-sensitive to further protect their identity and their credit card information.
* The system should inform the admin of any problem it encounters right away such as a breach in security, a scheduling conflict or cancelation, or whether the customer has a problem with his/her credit card/funds.

#### 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 add/remove/modify a user without needing to change the code. The system needs to be able to allow the owner to reset someone’s password if they forgot it or remove an employee’s access to the system if they are let go.
* They system should adapt to any updates that Microsoft releases. The system should have no trouble downloading and installing Windows updates as they become available.
* The IT admin will need to have full access to the system to be able to maintain and update the system and add anything new to the system that the company needs.

#### 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 system should require the user to enter their username and password to be able to log in.
* The security of the system should fall upon the Cloud service provider. They should be informed of the type of security you want.
* If there is an attempt of “brute force” hacking, the account should be suspended until the owner of the account can contact the company to confirm their identity and then reset their information to make it more secure.
* If the user forgets their password, depending on who it is, if it is an employee of the company, the owner has the permission to reset their password for them. If a customer forgets their password, they will have to click the reset password button on the login screen and then confirm their identity by sending a reset password link to their email in which then they can create a new password.

### 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 determine customer by their login credentials such as their email and password.
* The system shall provide the user with the choice of 3 different purchasable packages.
* The system shall gather user information such as name, address, phone number, email, and credit card information.
* The system shall schedule the customers appointment based on what type of service they are looking for, be it practice tests, written tests or driving lessons.

### 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 needs of the interface are to schedule appointments for driving lessons and driver’s test. The interface also needs to display online test progress along with notes for the customers from their scheduled drivers, their information including name, address, email, etc., as well as a table to show the times for the driving lessons.
* The different users for this interface are the owner, the IT admin, owner’s secretary, and the customers.
* The user will need to be able to create an account, login with username and password, schedule driving lessons, complete online classes and practice tests and provide a form of payment all through the interface.
* The user will be able to interact with the interface through a website on their computer along with their 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?*

* User is correct age to be able to take driving lessons.
* Internet is available at users’ location.
* User must have a valid home address and phone number.
* User must have a valid device to make an appointment, either a phone or computer.

### 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 system will stop functioning once the user loses internet access.
* The system needs to be accessible to be read in multiple languages.
* The system can only schedule so many appointments in a given day.
* The system must have enough information/classes for the user to be able to gain the knowledge in order to pass written exam as well as the driving test.
* The system must have electricity to be able to function.

### 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.*

