# 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 client is Liam with his IT officer Ian with the company DriverPass
* They want a system to provide resources and training to new drivers
* They need flexibility to add or remove packages their customers can purchase in the future

### 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?*

* Their goal is to provide a service that will help new drivers prepare to take the DMV driving test to reduce failure rates
* They want to help people pass their driving tests by providing online courses, practice tests, and reservations for driving training
* They will offer different driver training packages with different amounts of time the customers can purchase

### 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?*

* Registration that allows storing payment and contact information such as: first name, last name, address, phone number, state, and their credit card number, expiration date, and security code
* The system needs to work remotely so they can access it from home
* Different rights and roles where the owner will have access to all accounts for changing passwords or deactivating logins
* Appointment booking, modification, or cancellation done online or by secretary including day and time with a set allotted time of 2 hours per session and includes pickup and drop-off locations
* Track activity reports for changes made within the system
* The ability to automatically match and track driving instructors assigned to customers
* Automatic password resets if the customer forgets their password
* Connect with the DMV to keep information up to date for rules and sample questions, they want to receive a notification when there is an update
* Pages for customers to see test status taken or in progress as well as results, comments left by the driver, session start and end times
* Contact us page
* Collect 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 logic
* Test system
* Deliver 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 web based over the cloud
* Speed is not priority, but fast enough for user access without issue
* System updates according to DMV changes to policies and practice tests
* System updates anytime the client wants to add new features

#### 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 able to run on any platform as it will be web-based
* The customer prefers it to run over the cloud to handle backups for information and security which will take care of databases for the back end

#### 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 should have a unique case-sensitive username and password with a minimum 8 characters including at least one uppercase, one lowercase, and one number.
* Two factor authentication to help counter any hacking attempts
* Admin should be notified of bugs, updates, and outages

#### 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?*

* IT admin needs access to the system for changing modules in the code to expand their package offerings in the future
* Adding, removing, and changes to user accounts should not involve changes in code
* The customer prefers cloud-based, there will be minimal downtime to perform updates and maintenance

#### 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?*

* Each user should have a unique case-sensitive username and password with a minimum 8 characters including at least one uppercase, one lowercase, and one number and two-step authentication measures.
* Data exchange between the client and server will be handled by the cloud and should be encrypted to protect user information
* If the user forgets the password there will be a reset password link to email the user to make a new password
* Security measures will prevent brute force attacks by locking accounts after a certain number of failed attempts to enter 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 allow a user to register for an account and save their information
* The system shall have the ability to complete purchases for driving practice packages with varying time amounts
* The system shall book appointments on specific day/time made by users and show the driver the user is paired with
* The system shall provide courses and practice tests
* The system shall have a page to display previous test status and results
* The system shall have a section to display driver notes and feedback from previous sessions

### 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 needs to display a screen with sections for online test progress, driver notes, user information, special needs, driver photo, and student photo
* The interface must provide the option to make appointments and buy packages
* Users include the customers and the employees; employees should have the ability to make modifications
* Users can interact across multiple platforms with an internet connection as it will be web-based. Mobile, tablet, computer.

### 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?*

* We assume the user has up to date equipment (computer, tablet, phone) capable of web browsing and internet access
* We assume the users can navigate a website

### 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?*

* Budget for this system and security, they don’t want to manage in house
* They want to add packages in the future that will have to be modified in the code by someone who knows how
* It will rely on users connecting to the internet to access

### 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.*

Timeline

Description automatically generated