# 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 the owner of DrivePass
* DrivePass is a company that wants to offer users a way to study for their dmv tests
* They would also like to be able to offer practice exams with up-to-date driving questions/standards
* They would also like for users to be able to schedule road training with drivers

### 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?*

* DrivePass would like everything to be available online and for users to be able to download reports and some information to be able to view while offline.
* They would also like the system to be run through a cloud system
* The problem they are trying to fix is to many young people are failing their first time through the dmv process for obtaining driving credentials.
* The system needs to offer study materials with dmv regulations and practice questions
* The system also needs to offer practice exams with the users being able to see their previous scores and current progress.
* The system also needs to allow for users to schedule with a driver for training
* Offer packages users can purchase that can also be modified at a later time based on client demand
* The system also needs a way to track the students drive times with the companies’ drivers and for a place for the drivers to put notes about the progress of each student
* The system should also track the student’s information ex. Name address, phone number, pick up and drop off point
* These notes should be secured so that not everyone can see another user’s progress or personal information

### 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?*

* Drivers are able to input lesson times and notes about the users that are visible to the student, driver and the owner of the company
* Students should be able to purchase from three established packages and save their credit card information for future purchases if wanted
* Users should be able to see a picture of the driver the matched with along with their name and make and model of their car along with any other identifying features.
* Students will be able to track the tests they have taken with their scores visible to them as pass failed or in progress if not yet completed
* The owner should be able to track and see all drivers with their appointments with students and the progress of the students.
* Customers will also have the ability to reset their passwords if forgotten
* IT officer will have access to all accounts to be able to block ex-employees or to update forgotten passwords
* The owner will have access to be able to download reports to his computer to be able to access information offline
* Secretary will able to see all drivers schedules and be able to assist user who call in with scheduling with a driver.

## 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?*

* System should have frequent updates to make sure all bugs are taken care of and security breaches are a minimal threat
* DMV updates need to be priority and updated in the system almost as soon as the dmv updates their material/standards
* The system should run on a web based
* The system will need to be fast with the availability to be accessed by multiple users logging in and out accessing study/testing material

#### 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 all major web browsers for example Firefox, edge, chrome
* If users chose to access on mobile devices the screen should resize to the mobile screen
* Their will need to be at least database in order to store information

#### 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?*

* User will be distinguished by user email and their password for login ins
* Inputs for login should be case sensitive
* Admins should be notified if users fail at logging in after so many attempts
* Admins should also be notified if there is any failure to accessing study/testing material
* Admins should also be notified if an updates failed especially if updates contained dmv course material update

#### 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?*

* Admins should have access to change add and modify users with the need to change code
* Individual users should be able to modify their account setting within a limited capacity ex password, updating user information
* User should be able to sign in for the first time and create their profile
* IT admins should have access to viewing user accounts and blocking them from signing in
* It admins should not be able to view individual passwords but able to change

#### 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?*

* Users will require an user name and a password for login
* Passwords should be professional standard of at least 8 characters and one lower, one upper case, a number and one special character so that passwords are not easily guessed
* Using HTTP or HTTPS would be a good way to secure a connection or data exchange between clients and the server
* If a brute force attack were to occur after three failed attempts of logging a user’s account should be locked for 30 min if the user fails to type in the correct password again account will need admin to unlock account
* After the initial 3 fail and on the next fail admins should be notified of potential attack
* User should have an option to reset password through a forgotten password option that uses a predetermined and verified user email
* Users should also be able to call and/or submit a request online to reset or unlock an account or reset a password after they have verified themselves
* If user is unable to answer any question a physical appearance at a site will be required to verify user

### 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 confirm a user’s login information so that only the correct user can access his/her account.
* The system shall allow the customer to review package options and allow purchase
* The system shall update study and testing material based on dmv updates
* The system shall confirm customer details such as first and last name, pickup and drop address, phone number and payment information
* The system shall allow customers to review test scores and instructor feedback
* The system shall allow users to change passwords or reset if forgotten
* The system shall confirm type of user logging in basic user or an admin
* The system shall allow for the client to makes changes and disable packages if they become over booked and unavailable

### 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 different users are as follows admins and the end users that are the customers
* The interface should have an intail log in screen asking for username and password
* When an admin logs in they should have greater access than a customer’s login
* Admins should be able to make changes to the system and run reports on the customers and drivers they employ
* Users should be able to update their profile
* Users need to be able to purchase packages
* Users need to be able to view/edit appointment
* Take practice tests and view study material

### 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?*

* Users should have access to creating their profile/account
* Users should be able to login and access material 24/7
* Users can make schedule changes
* Users can track their own progress
* All users will have power and internet access
* Server will be able to support multiple users using the service at the same time without performance drop

### 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?*

* Good consistent internet connection will be a limitation for user to access
* Client has given us a timeline that limits how long we have to work on the program
* Client has not set a budget yet not knowing this limits us by not knowing how much we can spend or how much resources we can dedicate towards the project
* Material is based on how accurate the dmv updates their resources and guidelines

### Gantt Chart

