# CS 255 Business Requirements Document

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

The purpose of this project is to create an information system for the client DriverPass. The client is DriverPass seeks to solve the issues driver students face the system aims to solve this issue by letting the students access features that will help them succeed with their driver’s test. We hope to help out the client by implementing all the requirements as discussed in the initial interview.

Requirements include the following.

* Solve the issue that students have when complementing and prepping for Driver tests at the DMV.
* Offer accessible content for students Both Online and Offline.
* Let users create accounts independently and maintain their accounts.
* Take in DMV policies while actively staying up to date with new policies.
* Take advantage of the void in the market by offering SAS(Software As a Service).

### System Background

The problem DriverPass has identified is that there is a need for better driver training for students at their local DMV. The solution that DriverPass has purposed is to create an online application that can be accessed anywhere both online and offline for students to get access to additional content to help them in the form of online classes and practice tests, as well as on-the-road training.

Additional components needed to successfully implement this system are.

* System must be able to let users set up “reservations” with instructors.
* System be able to let other users(secretaries) set up reservations over the phone.
* System will be able to let users pick between one of three tier packages.
* System will be able to let students pick a driver and car for each session.

Provide a solution to students who want to pass the driver’s test at their local DMV.

### Objectives and Goals

The objective of this project is to complete the processes and features that the client wants to incorporate into the application. To let students, access online resources there will need to be built on a cloud-based system more specifically Software as a Service. Once established the users will need to be able to choose between one of three tiers which each lets the student access different benefits and features. The student will be able to access the first bundle to gain driving training within a set amount of time for the session. Bundle one has six hours with a trainer, bundle two has eight hours with a trainer plus in-person lessons where they explain the DMV rules and policies, and finally, bundle three will feature twelve hours with a trainer and DMV help plus access to online classes and practice tests. Each session will be compromised of two hours and the student will be able to choose the driver, car, time, and both the pickup and drop off location. And the student will be able to make appointments online and through a phone. Registration of the account must include first and last name, address, credit card information, phone number, and state. Finally, the account must have progress tracking for the students that can be seen for both the workers and customers of DrivePass.

Other additional goals to reach a DoD (Definition of Done) are included below.

* Track all appointment registration activity.
* Log all important information into the system.
* Complete booking system.
* Allow users to pay online.
* Allow users to access classes and prep tests for students.
* Provide updated policies from DMV.
* Booking system components must be present.
* Successfully passing tests.
* Successfully Process Payment for reservations
* Successfully set up reservations
* Successfully create a selection system for students.
* Successfully building interface.
* Completing Business Logic.
* Create a student landing page.
* Allow internal employees access and modify users’ accounts if necessary.

## Requirements

### Nonfunctional Requirements

* Portability: Must be accessible from a different device with different operating systems.
* Reusability: The users will need to be able to access the contents of the system, this means that different users should be able to do similar tasks by their account/user types.
* Security: The system must allow users to reset their passwords by themselves and let admin access accounts.
* Maintainability: The system must be able to let the admin users have access to modifications that will later be used to change plans, rates, and promotions of the system. As well as updating the documentation of the material.

#### Performance Requirements

* The system will need to be web-based ideally from cloud-based services. That way the users can access the system from any device and also lets the meet the nonfictional requirement.
* The system will need to run based on local DMV and also let the users have the option to call and make appointments. This means that secretaries will also need to have the same functions to register students for appointments which helps meet reusability requirements.
* Another feature of the system is to let users have different packages which will need to be organized by packages. The client will also need access and the ability to add and change promotions and packages in the future.
* The system will need to be run from any device from any location and let the user access content offline.
* For the system to be used offline the users will need to be able to download content so access can be achieved.

Based on clients’ need the performance Requirements will need to be as flowed to

#### Platform Constraints

* The System should be able to be run on all platforms including Windows, Mac, Linux, Mobile, and IOS.
* Cloud Based infrastructure is needed to provide backend access to all platforms conveniently based on a web-based system.
* Database should be included in the cloud to create and set up a database for all the users, drivers, content, and data.

#### Accuracy and Precision

* Users should have different access IDs in the user database so that each account can have different access to the system.
* Loggins to the users will need to be case-sensitive and consistent at all occurrences.
* The system should instantly inform users of incorrect login attempts for desired attempts. Once locked out the system admin should be informed about the system.
* All other critical issues such as failed registration attempts should be reported to admin users immediately.

#### Adaptability

* Function will be added for the users to add, remove, and modify appointments.
* Admin will have this feature to add, remove, and modify different parts of the system.
* The System will in return be able to add, remove, and modify packages by admins.
* IT admins will need full access to the system.
* Code should not be modified and the functions should be built into the code itself.

#### Security

* User is required to log in with case sensitive User name, and password.
* Data connection should promote single sign-in development patterns to promote direct exchange between data and the server Singleton Patter should be used to achieve this.
* Encrypted data should be used to help protect the data transmission.
* During brute force the account should freeze and be locked when attempted. IT admin will be notified and the login data will be captured and logged.
* Two-factor authentication should be present with the account to prevent unauthorized access.
* User should go through the password change process which included authentication to change the password.

### Functional Requirements

* The system shall let the receptionist make appointments for users in over-the-phone requests.
* The system shall be accessible offline anywhere.
* The system shall be usable on any device.
* The system shall let the users access the user profile and show data about users.
* The system shall show appointment details.
* The system shall let the users upgrade or change packages in the system whenever needed.
* The system shall validate logins.
* The system shall let the user update information at any given time.

### User Interface

* User interface should have navigation bars.
* The user will then need to be able to message other users and drivers with also be able to modify and create appointments.
* Different users include employees, IT admin, students, and drivers.
* The user will interact with the navigation bars within the interface on all devices and platforms.

### 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 are assumed to have online access for login.
* Users are assumed to have applicable devices.
* Users are assumed to have valid qualifications as student users such as learner permits and are of appropriate age.

### 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?*

* Time will need to be considered in all aspects of the system development.
* The system should have to run on current standards.
* Driver user types will be limited based on time constraints and thus have limited resources.
* Limited package designs.
* Not all features will be considered during the initial development of the system such as messaging subsystem for users.
* Offline content will be based on users’ devices and capacity.

### Gantt Chart

