# 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 of this project is DriverPass. The purpose of this project is to help DriverPass efficiently and effectively teach their students how to successfully pass their driving test by providing driving lessons, online classes, and practice tests.

### 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 system will access data from anywhere online and offline.
  + The owner asked to have access to data from any computer or mobile device while online.
* The system will have authorization and user privileges.
  + Owner – Data Reports
  + IT Officer – System Maintenance
  + Secretary – Appointments (Schedule and Modify) and user information.
  + User – Appointments (Schedule and Modify), Additional Material (Only with Package Three), and Personal Data.
* System will be used to make appointments for the customers to reserve driving lessons.
  + Will track appointment information (time, driver, and car)
  + Will track and build an activity report of all reservations made, cancelations, reschedules, and the user responsible for those actions.
* Users can only schedule reservations once a package is purchased.
  + 3 Main Packages
    - System owner can disable and enable packages for registration.
    - Package One – 3 two-hour reservations
    - Package Two – 4 two-hour reservations and an in-person lesson
    - Package Three – 6 two-hour reservations, an in-person lesson, and access to online class material
* System will be connected to the DMV to notify client of any requirement changes.
* Will securely store User Information (Name, Address, Phone Number, and Credit Card Info)
* Allow user to recover their file by changing their password if forgotten.
* System will run on a cloud server.
* System will track online course progress and test information.
  + Name, time taken, score, and status (not taken, in progress, failed, or passed) of the test.

### Objectives and Goals

*What should this system be able to do when it is completed? What measurable tasks need to be included?*

* Make and modify reservations.
* Collect and modify user data (student information).
* Notify client of any DMV requirement changes.
* User interface will show user progress, driver notes, user information, driver and student photo, and any special needs.
* Allow student to contact client and client to contact student.
* Distinguish what materials the user has access to

## 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.*

* System will distinguish each user to keep accounts secure.
* System shall track reservation information and modifications.
  + Who made the reservation, canceled it, and/or modified it.
  + System user, driver, car, and time of reservation.
* System will use authority privileges for security purposes.
  + System owner must be able to reset passwords and block user access.
  + Admin must set up new user accounts for students and employees.
* System must have large compacity limit to allow multiple users on at any given time.
* System must be flexible to edit product availability and system users.

#### 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 must be reliable and available to use at any given time.
* System should not lag due to a high number of users.
* System will be web-based and needs to be portable and run on multiple browsers.
* System must be able to scale and update as needed to keep up with additions and growth.
* System must perform fast and return results quickly for a smooth user experience.

#### 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?*

* System is web-based and needs to be connected through the Cloud.
* Back end will need a database table to link into the interface.
* System must be connected to DMV for policy purposes.

#### 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?*

* System will use the user logins to distinguish authority.
* Will inform an admin if a reservation is made or changed.
* Immediately log reservation information.
  + When they are made, changed, and modified.
  + User/Student, Driver, Car, and Time.
* Will inform an admin when there is a DMV policy update.
* Only allow admins to create new accounts.
* System will only allow customer to book reservations and allow access to material depending on the package that was bought.
  + Example: Customer can only schedule 3 reservations if they buy Package 1.

#### 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?*

* System will allow users to update and add user information through input control.
  + Owner will have authority to block and remove users from the system.
* IT will have authority to install system updates, modify the system, and to access and reset passwords.
* System will adapt as needed to automatic updates through the Cloud.

#### 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 admin is required to create new accounts and register users.
* Username and Password is needed to log in.
* User identity verification is needed to reset a password.
* Accounts will lock after too many login attempts.
  + Customer support assistance needed to unlock customer accounts.
  + IT assistance needed to unlock customer support accounts.
* Data between client and server will be encrypted for security.
* Full payment method and address information will not be shown on user interface.

### 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 use usernames and passwords to validate users.
* The system shall allow customers to reset their own passwords.
* The system shall allow the owner to disable package availability and block users.
* The system shall notify admin of DMV policy changes.
* The system shall allow all users to update their personal information.
* The system shall allow customers to schedule, change, or modify their reservations.
* The system shall produce a log of reservation and user information.
* The system shall log any reservation changes.
* The system shall allow customers and admins to book and cancel reservations.

### 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.)?*

* Interface users include the owner, IT, admin, and customers.
  + Owner will have access to all information, reset passwords, add/edit/remove users, and download data reports.
  + IT will have access to modify system and to reset passwords for all users.
  + Admins will have access to build accounts, account information, reservation information, and reset customer passwords.
  + Customers will have access to make/change/cancel reservations, see personal information, edit personal information, and change their password.
* System will require an admin to input the first name, last name, address, phone number, state, and credit card information of a customer to register them and build an account.
* System will be web-based.
  + Interface will be accessed through an internet browser.
  + Cannot be accessed off-line.
* Customers will see their personal account page when logged in.
  + Online test progress
  + Personal information
  + Driver’s notes
  + Special needs
  + Photos of the driver and student

### 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?*

* That the database will be ready before development.
* The customers will be using web browsers on any device of their choosing (computers, tablets, and smart phones) to access the system.
* Owner, Admins, and IT will need to look up the user through credentials to access user account information.
* Admins will be notified through a connected email about any reservation and DMV changes.
* All their customers have access to the internet.

### 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?*

* System needs internet access to run.
* Do not know if there is a budget the client wants to stay within.
* System needs to be done by May 8th .
* Information about the charge and banking process is limited.

### Gantt Chart

