# 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?*

* This project is for one client of our small consulting company, a driving training service, DriverPass The purpose is to provide their customers the ability to practice their driving skills through test online with the ability to schedule course and on-the-road training.

### 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 customer asked us to build a system that enables customer to reserve lessons, take tests and check their progress.
* The customer asked us to build a system that they can work on offline by downloading reports to their machines.
* The customer wants the ability to track fingerprints on their system to see who is responsible to what.
* The system will connect to DMV to check for DMV policies and rules updates and notify the owner.
* The system will consist of multiple type of user authentication and roles.
* The customer is preparing his customers well before taking the DMV test.

### 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 will provide the customer
  + To login to their online dashboard
  + Check their progress
  + Take tests and practice
* The system will provide the secretary
  + To sign up customers
* The system will provide the administrators
  + To track users’ footprints
  + Reset passwords
  + Block/give access

## 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.*

* Customers should not be able to modify their test status
* Customers should not be able to have access to the lessons if not subscribed to a package
* Information gathered from customers should be valid and accurate like credit card numbers and addresses

#### 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?*

* A web-based application
* The system should be responsive (lower waiting times for authentication and data retrieval)
* Connection to DMV updates should be maintained to get most recent updates and notified when an update is done.

#### 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?*

* Preferably UNIX platform for more control and manageability.
* Database to store lessons, customer information, authentication.
* A web interface as a website to have a good representation and responsive contact with customers and users
* A backend server to be processing requests coming from users and customers

#### 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?*

* Users will have roles assigned by the administrators
* A user by default is a customer
* Validation should be on both front and backend
* Notification when updates are in place in the DMV
* The system should log everything for a timespan so administrator and ones with access can see what’s going on.

#### 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 needs all access over all users
* The administrator should be able to update and modify data except for modules
* Customer can sign up, login, RSVP and take test
* Secretary can sign up customers
* IT can restrain access to users

#### 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 customer has to be authenticated and subscribed to a package to be able to use the service
* IT can reset password for all account
* The customer can reset his password automatically
* Admins can see footprint of everyone on the system

### 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 be flexible and serving many types of users
  + Administrators
  + Customers
  + Employees (Secretary)
* The system must determine the user type when authenticated
* Valid data should be provided
* Employees can sign up customers
* Customers can reset their passwords automatically
* Admins have more privilege in the system
  + They can reset, give/block access
  + See footprints of everybody on the system
  + Download reports

### 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.)?*

* A web interface is needed
* Customer provided a blueprint of the design in mind
* Admins should have the ability
  + to track data in the system
  + to print reports
  + to sign up users
  + reset passwords
  + block/give access
* Customers should have the ability
  + To contact service provider
  + Login
  + Reserve lessons
  + Sign up
  + Check progress on a lesson
  + Subscribe to packages
  + Logout
  + Cancel a lesson

### 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?*

* The customer needs to practice his driving skills
* The customer has an address
* The customer payment method is a credit card or a debit card

### 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?*

* A connection to DMV database is not acquired
* Payment portal is not performing well
* Short on cars and trainers
* Invalid data input

### 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.*

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