# 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 purpose of this project is to design and develop a system of information for a website application that runs in the cloud which provides driving students of DriverPass online classes (with offline capabilities), practice exam and the ability to schedule in person classes. The system has several stakeholders including IT, management, and customers.

### 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?*

* To provide driving students with a cloud base online learning portal that prepares students for the state DMV exams nationwide, DriverPass wants the system to manage and enable online classes with download option for students to study online and offline
* Manage multiple type of profiles with different permission sets
* Pull data from each states DMV to maintain practice exams current.
* Allow students to register for in person classes, and to choose which driver they want from the selected time slot
* The system should track, quantify, and report on the class registration and the pass fail / ratio
* Notify system admins when updates to state DMV rules

### 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?*

* Manage different roles
  + Have different system permissions for different users:
    - System IT
    - System owner
    - Students
    - Drivers
* Manage registration to in person classes
  + System assigns a driver and car based on the date and time
  + System notifies owner of Driver Pass when a student schedules, cancels, or modifies an in-person class
* Manage credit card payment
  + Students can purchase packages
  + Students can purchase single in person sessions,
  + Students can purchase online materials
* Student profiles
  + Organizes their bought content, and the progress on each module
  + Shows the driver notes for each training session associated to the student profile
* IT admin access
  + Modify content
  + Deactivate any online material

## 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?*

* Web-base (cloud)
* It needs to be quick for customer satisfaction
* It should only be updated when there is conflict with new updates in different state DMV’s
* It will only be updated by the development team when there is a need to make any change

#### 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 will most likely run on a cloud-based network
* The informational system will not be running on user devices
* Web browser support for multiple devices will be needed

#### 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 will have its own profile, and each profile will have the same user profile permissions.
* Admin permissions are only provided on a as needed basis and before launch those specific users will have their admin access granted.
* Input is case sensitive
* System should inform admin of a problem on the following instances:
  + Downtime
  + Too much traffic in a specific node
  + When users are reporting issues with their accounts
  + Duplicated log in entries for the same profile

#### 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?*

* Yes, IT will have access to add / remove / modify users without changing code
* Platform updates will need to be coded
* IT also need access to reports and disabling content

#### 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?*

* Only one session per user profile is allowed
* Application will only make requests to the servers when a user is logged in
* User must register with their first name, last name, and address
* If any brute force hacking attempt account becomes locked, and will require re-verification of user credentials
* User will use traditional reset password method by sending access code to the email verified

### 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 manage different roles
  + The system shall have different system permissions for different users:
    - System IT
    - System owner
    - Students
    - Drivers
* The system shall manage registration to in person classes
  + System assigns a driver and car based on the date and time
  + System notifies owner of Driver Pass when a student schedules, cancels, or modifies an in-person class

* The system shall manage credit card payment
  + Students can purchase packages
  + Students can purchase single in person sessions,
  + Students can purchase online materials
* The system shall allow drivers to provide feedback for each driving class
  + Diver feedback gets added to the respective student profile organized with the following data:
    - Lesson time, time started, time finished, Diver comments
* The system shall user profiles
  + Allows users to reset password
  + Allows users to access their content online and can be downloaded for offline view

### 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.)?*

* User must be able to look at what days are available for scheduling a class, and what drivers will be available for each time slot which will also show the car they will be driving
* User must be able to see the online content that is available for purchase, and the different packages available for purchase
* User must be able to purchase with credit card
* User must have a way to see content offline
* User should receive a notification when any of the downloaded content has been updated

### 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 designing of the UI and the navigation of the user is not specifically addressed. We are assuming that user has access to internet through a mobile device or personal computer.

### 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?*

* Most of the functionalities require internet connection for the data to flow appropriately and for any updates that will need to be made to the system.

### 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.*

[Insert chart]