# 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 create a system called DriverPass, which will facilitate Driver Education.
* The Primary Client is Liam the CEO of DriverPass.
* The System should be able to:
  + Facilitate Online classes.
  + Offer Practice Tests.
  + Facilitate On-the-Road Training/appointment scheduling.
  + Offer online and off-line functionality.
  + Log Data for Security measures (company side)
  + Connectivity with DMV Data (Updates that affect Driver Training)
  + Hosted online through Cloud Service
  + GUI for Student and Clerical ease of use.

### 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?*

* DriverPass wants the system to facilitate Driver Training and Education in relation to their business interests.
* The Problem they want to fix is the void within the market in relation to Driver training in preparation for DMV licensure tests.
* The different components needed for this system would be:
  + Account Creation and Role Based privileges.
  + Appointment and Scheduling for On-The-Road Training service.
  + DMV Update
  + Online Classes and Tests
  + GUI for web page

### 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 when completed should be able to enable the Students to fully interact with their educational materials, while also being able to schedule appointments for Driving sessions with instructors. While from the Employee/Owner side of the system be able to modify student appointment data, access data offline, and in some cases (IT) be able to manipulate account data and privileges. There should also be notifications to DriverPass staff when the DMV changes anything, so they know they need to update their educational materials.
* Measurable tasks that need to be included in the system design to achieve this:
  + Account Creation
  + Account Privileges
  + Offline Access
  + Class materials are accessible
  + Student Progress page implemented
  + Appointment Scheduling application
  + DMV Update Notification

## 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?*

* This will be a web-based application that will be hosted through a cloud service provider.
* The System should be updated daily
* The system should be responsive but does not need to run at blistering fast speeds

#### 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 run Linux due to the client’s desire to be cloud-based and I believe most cloud environments tend to prefer Linux.
* This application will require a database to host not only User Account Data but also the Course materials for the online classes.

#### 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 most likely be distinguished between one another at account creation, when their respective role will be applied to them and RBAC will most likely be set in place by the IT department of the client.
* The System should ping an admin if a problem is discovered.
* Input should be case-sensitive since more than likely accounts will have at least the standard Account name and password structure.

#### 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?*

* From the interview transcript it would seem that users can’t necessarily make changes without changing the code.
  + Except the instances of standard account interactions and The CEO’s requested ability to be able to remove packages from the services they provide without having to change the code.
* The IT admin needs to be able to give or revoke access of employees and to be able to reset passwords when needed.
* The system will require a systems analyst or a developer to be able to make platform updates if the cloud service that hosts the website does not handle it.

#### 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?*

* Account name and Password
* The exchange between the client and server will have to be dealt with by the cloud hosting service.
* If there is a Brute Force attack, once discovered the account should hopefully be locked down by the IT Admin, however that will be up to the DriverPass IT team not much; I believe we will be able to do from a design perspective.
* If a user forgets their password that will be up to the IT team to reset it for them.

### 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 enable offline access.
* The System Shall facilitate Driver Education.
* The System Shall facilitate Driver/Instructor appointments.
* The System Shall facilitate the IT team’s administration of the system itself.
* The System Shall allow the removal of “packages”.

### 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 needs of the interface were given within the interview by the CEO.
* The interface given by the CEO will primarily be used by students interacting with the system during their online training.
* The user will interface with the system through a web browser.

### 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 First assumption that was not specifically addressed in the design above would be the interface for employees when they interact with the system.
* The Second assumption would be that we have not considered how the web page given to us by the CEO may look when viewed through a mobile browser.
* The Third assumption would be that the security features in relation to internet traffic will be handled by the cloud service.

### 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?*

* The limitation here is that the system must be hosted on a cloud-based system due to the call for it be hosted on the cloud by the design requirements given by the client.

### 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.*

