# 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 Drive Pass
* Drive Pass wants to make a system that will provide better driver training to their clientele with online classes, practice tests, 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?*

* Drive Pass wants their system to provide
* Security Component needed
* Schedule component needed
* Ability to change appointments as necessary
* Account system is needed

### 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?*

* Download reports
* Access data online from any computer or mobile device
* Track any revisions/changes to a record in the system
* Reservation/appointment system that's attached to each user account
* Admin should be able to enable or disable packages
* Automatic password recovery

## 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?*

* The system should be able to run off of multiple platforms so the users can access information from anywhere. This would include Android, IOS, and Web Browsers
* Since it should be information that a user should get at an instant each application should be stable and fast
* The system should update regularly when there is a need for for instance a new security update, User Interface update, or if there are new laws or regulations from the DMV where the application must update.

#### 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 platform constraints that the system should run on would just be a Web Browser where it would involve HTTPS, HTML, CSS, and JavaScript.
* The other platforms that the system should run on would involve Android and IOS so that users would be able to access information directly from their mobile devices
* The back end shouldn't need any special tools, as Drive Pass would be web based, the applications on Android and IOS would just have to request information from the web browser and display it on their specific application

#### 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?*

* The main way to distinguish between different users, each user would have to log in with a username and password in order to access each user's unique account.
* Each input would be case sensitive
* After a certain number of tries to log into said account it would lock the users account, prompt a password recovery, and then send a notification to the admin to inform them of a problem

#### 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?*

* The adaptability to add, remove, and modify information is incredibly vital to keep the user information up to date
* The system will have to adapt to platform changes by receiving the user information and then sending that information to the system database where it would change the values
* As for updates the web service should have dedicated down time for updates and maintenance as well as having some sort of system to roll out updates to android and ios
* The IT admin would need access to the source code, ability to modify the code, and have access to new regulations from the DMV to update the database

#### 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 user will need a username and a password to log in
* The main way to secure the data exchange between client and server would be to have encryption with the data sending to make sure that unauthorized users would be unable to see what data was being sent between the system and user.
* If there was a brute force type of hacking, the account would be locked and then a notification would be sent to the admin informing them of what was happening
* If the user forgets their password, they would have to answer some case sensitive security questions in order to prove their identity and then be given a prompt to reset password if successfully answered

### 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 validate user credentials when logging in
* The system shall update policies when there is new information from the dmv
* The system shall allow password resets
* The system shall allow online tests
* The system shall display user information
* The system shall update user information when needed from different platforms

### 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.)?*

* There are several things that a user interface should display for the users which would involve:
  + Driver Notes
  + Student Information
  + Driver Photo
  + Student Photo
  + Vehicle Photo
  + Testing Progress
* As for administrative user interface what would show them would be:
  + User accounts
  + Driver accounts
  + Payment systems
  + Security systems
* The user will interact with the interface in different ways. They will either interact with it via mobile, or browser depending on how they want to view the information

### 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 assumptions with this system is that the user has a working android device
* Another assumption is that the user has a working ios device
* Lastly if need be the final assumption is that the user is able to gain internet access to be able to bring up the system on their web device

### 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?*

* Some of the limitations would involve how much data to show on the users screen due to the size of the display on their phone
* Have to optimize web based applications to limit resource usage as mobile devices are not as powerful as computers
* Budget limitation would limit how long the project would take and if some functions would be able to be implemented due to budget constraints
* There is also a time limit of around roughly 5 months to get the system operating

### 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.*

