# 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 the project is that the client , DriverPass, is looking into a new web application that has the capabilities to manage and track the student drivers schedules.
* The system shall have an online practice test in order to prepare for any exams

### 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 to improve the passing rate for driving test at the DMV,
* DriverPass wants to create a system where users can have a place where they can prepare for the test with practice exams and on the road training.
* The system will be able to be accessed by both customers & employees
* The system should:
  + track progress of online tests
  + Be able to manage user information within the system
  + schedule and manage reservations for training.
  + have different roles in place from users to admins

### 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?*

* When the system is completed, the system should :
  + allow users to schedule and manage their appointments with DriverPass.
  + allow students to keep track of all their progress and performances.
  + have and maintain a up to date database of driving instructors and vehicles that are available
  + create reports for instructors that record students progress and performance
  + establish a security within the system in order to keep all users information private and secure
  + allows for off the road training with experienced instructors
  + have a high prioritization in data security, ensuring only authorized users have access to certain information within the system.

## 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 withstand a high user traffic without a drastic change in performance.
* The system will be making frequent database queries, the information will have to be relayed to the users as quickly as possible to not hinder convenience.

#### 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?*

* To maximize usability , the system should be accessible from both mobile devices and web browsers.
* I would run the system on Windows, for the back end it will require databases to manage & store information obtained within.

#### 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?*

* In order for one to distinguish between different users, the inputs should be case sensitive.
* When making an account in the system a new user will enter their email and create a unique username that is limited to one. If any problems arise they can request a password change.
* If that fails to resolve the issue, the admin can potentially be alerted from a max password login attempt.

#### 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?*

* Users shall have the ability to edit/ modify or delete any information that is within their own personal account.
* Employees shall also have some admin privileges to remotely change/modify a user's information if a user requests help.
* The IT admins should have access to any necessary user information. The IT admin should also have access to the system.
* For platform updates, the current version should be saved and backed up, then the newer version be implemented, following some Quality Assurance to ensure that the new update is functioning as planned. If not, the previous version that was backed up can be restored.

#### 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?*

* When creating an account a new user will be prompted to create a personal email and create a unique username alongside a password with high safety requirements.
* In order to combat the use of bots, utilize an email authentication process, where a user has to click a link in their email confirming ownership of the email being used.
* When creating the system, it shall have a process where if a user has attempted too many times to access an account with incorrect credentials, the account in question shall be locked out, requiring either a password change or request from an admin to unlock the account after verification of ownership.
* If a password is forgotten, the system will have a “forgot password link” where a user can utilize this and request a password change via email or security questions.

### 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 confirm and validate users login credentials
* The system shall allow user to create and manage reservations
* The system shall be updated regularly with all DMV policies and rules.
* The system shall allow users to partake in the online practice exams

### 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 interface shall:
  + be user friendly
  + be easy to navigate
  + give users to register and login to their own account
  + be web based and functional on any platform
  + allow admins to manage data regarding the users profiles and analytics

### 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 user will have internet access
* The user has a device that is able to access the website
* The users will have the appropriate information to register online

### 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?*

* Language - at launch the system will only be available in english until a proper translation can be implemented
* The budget for maintenance after the completion of the initial 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]