# 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 is a company called DriverPass, and their goal is to provide an online driving test training platform for users trying to prepare for their drivers test.

### 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 fix a lack of proper training for drivers exams
* The system would need to provide training and practice exams
* The ability to schedule on the road training with a local instructor
* Content would need to be available online as well as offline.

### 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?*

* Content should be available offline
* Customers should have the ability to schedule, edit and cancel on the road sessions
* Needs to have an administrative backend
  + To assign roles for each user
  + To update course content
  + To provide customer service

## 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?*

* DriverPass would like the system to be a web based application, so cloud based would be ideal.
* The system should be fast enough to not impact end user experience
* Being cloud based it should push updates out automatically, but should also send notifications

#### 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 be cloud based so it can be applied to other platforms, for example web browser, IOS, or android.
* Database would be ideal to store user data along with all the training materials

#### 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 user will sign up with a unique email address that hasn’t been logged in to the system before.
* Password should be case sensitive with a minimum character, capital requirement, number requirement, and special character requirement.
* The system should inform the admin immediately of the 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 code should not require alteration when changes are made to the list of users.
* The system should adapt to platform updates which would be done by developers
* The IT admin would need the ability to perform updates as well as update users and their roles.

#### 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?*

* There should be a password complexity requirement implemented
* In the event of a “brute force” attempt the account should be frozen and any access will be frozen with the user being notified.
* Users that have the ability to modify data or have access to the backend of the program will need to have a form of two factor authentication.
* The connection between the client and server should be secured with an AES encryption algorithm.
* In the event a user forgets their password, their should be a password recovery option that is authenticated via an email verification, which is a common method used in password recovery

### 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 provide content online and offline.
* The system shall have the ability to schedule appointments.
* The system shall run fast and efficiently.
* The system shall maintain a database of user accounts, training content, and current offers.
* The system shall track customer training progress.
* The system shall authenticate users upon login.
* The system shall freeze account upon hacking attempt.
* The system shall display instructor to booked client.

### 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 would need to be via web browser for computers and mobile users should have an application available through the app store or google play.
* The users would be the admins, instructors, and customers.
* Each user must have the ability to log in to their account and navigate to various aspects of the program based on user role.
* Users will need a touch-based interaction via the mobile app, and computers and tablets should have the ability to for both touch and keyboard/mouse.

### 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?*

* One assumption is that many users would be accessing the system on a mobile device.
* One assumption is the budget for the project. Servers and cloud-based systems aren’t cheap, and the client has not disclosed budget information.

### 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 limitation would be the possible inability to sync with the local DMV to ensure content is based on current regulations
* There might be a limited budged that I was unaware of at the time of this document.

### 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.*

*A picture containing screenshot, text, diagram, plot

Description automatically generated*