# 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, DriverPass, wants an online system for people to take practice driving tests to help more drivers pass the driving test. The website should also allow for booking 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?*

* The system will allow drivers to access online practice exams and classes as well as the ability to schedule on the road training.
* Internet connection will be required as this will be in website format.
* Access for different users and what they have access to shall be considered in a security aspect.
* All reservations, cancellations, modifications, and different training packages shall be tracked by the system, too.

### 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 this system is completed, it shall be able to allow customers to book, edit, and cancel on the road training for the driver test.
* Practice tests and online classes shall be offered.
* The system shall allow only those with access, the employees of DriverPass, to make changes or improve the system.
* Object models, process models, and UML diagrams shall be used to help one visualize the system in order to create it.
* The operating platform and languages that will be used to create the website shall be discussed and decided upon by the project team.

## 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 application shall be run on a cloud-based server.
* The system shall run as quickly as the user’s internet connection allows.
* The system shall be updated as updates are available. The user shall have the option to change the updates to every 24, 48, or 72 hours.

#### 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?*

* DriverPass shall be accessible across multiple platforms including Windows, iOS, Android, and Unix devices.
* Databases shall be required for users, their progress, courses, etc. to support this application. Platform compatibility is essential for these databases and shall be maintained by a third party cloud server.

#### 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 username shall be unique to the user, with input being case-sensitive.
* Each user will be assigned a class (customer, employee, administrator, etc.) to distinguish different users and user functions. The class shall not be displayed for customer-view but Admin-view.
* Admin shall be updated when changes are made to the system and shall receive a message when an error occurs.

#### 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?*

* Changes to the user shall be made with or without changing code depending on the change and level of access needed to make the change. Less access allows for fewer changes.
* Platform updates shall cause a system update only if the platform update causes changes to the system. If the system is unaffected, the system shall not update.
* IT Admin shall require access to force an update or stop an update as well as make changes to user profiles.

#### 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?*

* A username and password shall be required to log in.
* Multi-factor authentication shall be implemented for data exchange between the client and the server.
* In the event of brute force hacking, the system shall lock the user out of the system after x number of attempts is attempted, x representing the number of attempts the client selects.
* If a user forgets their password, they shall be able to utilize a link labeled “Forgot Password” that redirects them to reset their password using an already provided email address or phone number. This shall also require multi-factor authentication.

### 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 require multi-factor authentication when logging in.
* The system shall track the progress of users and provide the user and admin with the results daily, weekly, monthly, yearly, and as requested.
* The system shall notify admin when an update occurs.
* The system shall notify admin when changes are made to schedules and courses.
* The system shall allow user to make edits to appointments already booked.

### 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 user interface needs to have the ability to display progress, user information, notes from instructors, special requirements of user, and a photo of the user.
* Different users for this interface include clients/drivers and employees/instructors.
* Clients/drivers shall be able to view their information and progress, schedule classes, sign up for courses, and take tests. Employees/instructors shall be able to view their information as well as the progress and schedule of their clients.
* This interface shall be accessible on all platforms.

### 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?*

* Calendars for courses and classes offered are not addressed in my design. The user being able to have their account unlocked is also not covered above.
* The assumption is made that the clients have access to a phone, laptop, or computer to upload a photo.

### 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?*

* Time and technology are both limitations with this design. Time is a limitation in every project with an end date. Technology is a limitation here because a third-party server will be utilized.

### 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.*

Graphical user interface, application

Description automatically generated