# 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 provide training to customers via online classes and practice tests. The client is DriverPass, and they want their system to better prepare customers for their driving tests to prevent failure of tests and even offer on-the-road tests if necessary.

### 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 better prepare customers for their drivers test and to be able to allow users to make reservations for driving lessons and offers 3 packages with different amenities. They want the user to be able to make reservations and schedules with their very own account online. They want to solve the problem of underprepared customers who have to take a driver test with a higher chance of failure. The different components needed for this system are a server or cloud , security, monitoring or tracking , and an interface for the site.

### 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 should be able to allow users to view the progress of tests, courses completed, Notes, Student and Drive photo, special needs, and information. It should also allow users to make reservations for training. It should also allow the IT to access and monitor data and changes to the system as needed. The measuring tasks should be planning and Analyzing to gather data. Designing what was gathered and implementing what is needed.

## 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 environment that this system should be run-on, would-be web-based and preferably run on the cloud. The client mentions that they do not want to deal with backup and security, so cloud would fit that need mostly.
* The system should run fast as they may have many customers and if the system ran slow that would be inefficient.
* It would be better to keep the system up to date often to reduce security risks and improve performance.

#### 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 platforms that the system should run on would preferably be windows as it is much more accessible than other platforms and many users use windows as opposed to the other, Window is also much more flexible as opposed to Apple, or Linux.
* The back end would require a database for information storage and such.

#### 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 client mentions that users will create accounts when using their platform, so the distinguishable way’s to tell different users would most likely be by their legal names on their accounts or possibly even by usernames.
* It would be good practice to use case-sensitivity to protect users and their accounts.
* The system should inform the admin of problems when issues or errors occur that can impact the systems functionality, security, and data.

#### 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 system should allow for users to be added on, removed, modified without the use of changing code.
* The system should be able to adapt to platforms by being developed using best practices, such as using scalable technologies and performing regular testing and quality checks on the system.
* The IT admin needs administrative access, they need to be able to resolve issues any user is having or to be able to get into the system to resolve errors.

#### 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?*

* What is required for the user to log in would be a user password and email possibly or an authentication system.
* To secure data you can use secure communications such as HTTPS to ensure that data transmitted between the client and server is encrypted and secured.
* If there is a brute force hacking attempts , the administrators that have admin access should be alerted. The system should also require a account lockout after a number of attempts, and CAPTCHA would also help in case someone is using computers to try to access data.

### 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 allow customers to create reservations for driving lessons and tests.
* The system shall provide different packages for driving lessons with different features.
* The system shall allow users to reset passwords.
* The system shall allow users to contact customer support.
* The system shall display course and exam progress, etc.
* The system shall track and record customer activity, including reservations details, modifications, and cancellations.
* The system shall ensure that a secure connection is made between the client and server for data exchanges.
* The system shall notify the admin of any system issues.
* The system shall determine the user account type, such as admin, IT, user.

### 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 needs user registration, account management, Test tracking progress, and communication capabilities.
* The needs of the interface are that the interface must be user friendly and allow for ease of access.
* Different users of interface would be the client, the IT, and the end users.
* The Client will need to have access as they are the main people, IT would need access to monitor any issues or activities that need to be addressed, The end user needs to be able to access their account and activities.

### 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?*

* Security measures that need to be implemented.
* The design does not show how the system would handle errors and communicate them although it should be able too.
* There would be a mobile application of the software.
* The system will line up to date with DMV scheduling and short notice changes to schedules.
* An assumption would be the users have access to strong and fast internet connection or even any internet connections.
* That the End users know how to use Computers and technology.
* Users will be students only.

### 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 scalability of the system and its features.
* Customizability, They mention the customization of packages but there can be some customizations of the system that may require adaptation.
* Good and stable internet access for accessibility. This could be affected if a certain user cannot afford that type of internet.
* The clients budget.
* The Technological limitations for compatibility , performance, security, etc.

### 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 text, screenshot, number, square

Description automatically generated