# CS 255 Business Requirements Document Template

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CS-255 Project One submission

## 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?*

* This project's purpose is to help drivers in the market to pass their driving tests
* The client is DriverPass, and they are looking for us to support them in creating a website that will give students an opportunity to prepare for their tests by using practice exams. The system is also required to book training on the road.

### 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 needs to be accessible both online and offline.
* The system should keep track of all reservations, cancellations, and changes, and provide three distinct on-the-road training packages.
* The system needs also have adequate security.
* Prepare students for driving tests.

### 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 complete, clients should be able to book, change, and cancel on-the-road driver instruction through a website.
* Customers should be able to take practice tests and classes online once the system is complete.
* To make modifications to further improve the system, the system should only provide specific access to specific members of the team.
* We should employ object models, process models, and UML diagrams to aid in the creation of the system.
* Choose an operating system and the languages we'll use to build the website.

## 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 for the system is supposed to be web - based. It can be able to run on web browsers of operating systems.
* The system will need an update when DMV gets new policies.

#### 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 on which it will be operated is unimportant because it will be done in the cloud by an automated system. However, Unix is the most likely option.
* A database will be required for the back end to hold user credentials.

#### 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?*

* Any difficulties, malfunctions, or faults with the website should be reported to the system promptly so that it may be fixed as soon as possible.
* When a user first visits the website, he or she should be able to establish a username and password.
* Case should be considered while entering data.
* Multi-factor authentication should also be included in the system to make it more difficult to hack into an account.

#### 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 IT administrator will have full access to the system and will be able to make any required modifications or delete previous employees who no longer need access.
* You will be able to make changes to users and remove them from the system without having to change the code.

#### 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 require a username and password to log in, along with multifactor authentication.
* The cloud will be responsible for the data exchange between the client and server.
* The system should disable the account after four incorrect logins to prevent brute force attacks.
* If a user forgets their password, they will be prompted to enter the email they used to set up their account, and a password reset link will be sent to that address.

### 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 will validate user credentials when logging in.
* Book reservations when made by the user.
* Provide practice tests, and classes.
* Show the driver the customer is paired with.
* Offer three different driving packages.
* The system shall run fast and efficiently.

### 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 should be able to make and change reservations
* Cancel reservations
* The users should be able to make changes only to their accounts
* Admin should be able to make changes to accounts when necessary

### 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?*

* User should have internet access
* User registered an account with driver pass
* User has a unique username and password
* User will have email or phone number registered as a backup security feature

### 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
* Budget
* Skill of the team creating the 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.*

Table

Description automatically generated