# CS 255 Business Requirements Document Template

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CS-255

Project One: Business Requirements Document

## 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 for this project is DriverPass. They are a company that aspires to assist in training students for their driving tests. They would like to create a system that will allow student drivers to take online classes and practice tests before they take their drivers test at the department of motor vehicles (DMV).

### 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 client for this project is DriverPass. They are a company that aspires to assist in training students for their driving tests. They would like to create a system that will allow student drivers to take online classes and practice tests before they take their drivers test at the department of motor vehicles (DMV).

*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?*

* Liam, the owner of DriverPass, is hoping to take advantage of a void in the market when it comes to training students for the driving test at their local DMV. To fix that problem, they would like to create a system that will allow student drivers to take online classes and practice tests before their final driver’s exam. DriverPass would like to be able to access their data online and download reports from any computer or mobile device. The system would need a password protected security system that would only allow certain users to have full access to data. The system also needs to be able to track driving lesson reservations, user data, instructor data, and vehicle data. Users should have access to log into their account and modify reservations as needed. The program must offer three instructional packages as described by DriverPass. The program should be accessible on the web and be stored on the cloud. Finally, the user interface should be built to match DriverPass’ provided to us.

## 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 shall operate over the cloud.
* The system shall be web-based.
* The system shall reasonably fast to allow users to use the website without difficulty.
* The system shall be immediately updated when new features are available.

#### 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 shall run on any web browser.
* The system shall use the cloud to manage the security and databases on the back end.
* The mobile browser shall be compatible to the user interface.

#### 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 user shall be prompted to create a username and password their first time accessing the website.
* The input shall be case sensitive.
* The system shall have multi-factor authentication to maximize security.
* The system shall report to the admin immediately of any glitches, or bugs detected within the website.
* Daily reports shall be sent to the admin detailing any critical issues.

#### 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 web application shall be continuously updated.
* IT admin shall have access to the databases and servers to make necessary changes or to remove former employees from having access to administrative aspects of the program.
* The system shall allow changes to be made to users and remove users without altering 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 shall create and maintain a username and password to log in to the system.
* Multifactor authentication shall be required as an added security measure.
* Multifactor authentication shall be sent via SMS or email per customer preference.
* The cloud shall execute exchange of data between the client and the server.
* The system shall disable accounts after four failed login attempts and require the user to be verified via SMS or email and be prompted to create a new password.

### 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 users’ credentials when logging into the system.
* The system shall verify user using multifactor authentication via SMS to the users’ phone.
* The system shall schedule and track appointments.
* The system shall become disabled after four failed attempts to login.
* The system shall provide practice exams and classes.
* The system shall provide the information of the driver the customer is corresponding with.
* The system shall be fast and efficient.
* The system shall provide custom access based on the user and their privileges.
* The system shall supply information on the tests and work the user has completed.

### 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 allow the IT admin to make changes and update the system
* The interface shall provide the customer with the option to purchase driving appointment packages and take practice tests as needed.
* The system shall allow the user to interact with the interface from a mobile phone, computer, tablet, and any other device that has internet access.
* The interface shall be web based.
* The system shall allow admin to make appointments for users if they would rather order through phone.
* The user interface shall aesthetically look like the example given to the development team.
* The user interface shall appear organized and have a cohesive theme throughout.

### 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 system must be compatible with all browsers.
* The system must be completed within 5 months.

### 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?*

* Budget – No budget was given to complete the system. Therefore, we must assume that we may use whatever funds needed to meet all the requirements established by DriverPass.
* Access –It is assumed that we have access to all the technology needed to complete the system. This information was not detailed. So, issues may arise.
* Comprehension of the user – We assume that all users will understand how to use the website as it is self explanatory.

### 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 screenshot of a computer

Description automatically generated with medium confidence