# DriverPass Business Requirements Document

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## 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 is to build an online system to help students train for their driving test.
* The client is a company named DriverPass.
* The system should provide an online platform for driver learners to take online classes, practice tests, and schedule on-the-road driving lessons.
* The goal is to reduce the number of people failing the driving test at the DMV by providing the best training possible to make sure they are successful at obtaining a driver's license.

### 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 a system in which customers can have an account, take practice test, take online classes, and be able to schedule driving lessons.
* The problem is that they aim to fix with this system is to help those failing at the DMV be more prepared for the test.
* The different components are a database to store customer’s information
* Login feature to authorize and limit accessibility.
* An online learning classroom.
* An on-the-road driving lessons section where customers can schedule a lesson based on availability.

### 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?*

* Able to create accounts for login.
* Restrict access based on account (Admin, customer, IT, secretary)
* Offer practice tests.
* Offer online classes.
* Offer driving packages.
* Accessible online from any device.
* Measurable tasks: collect requirements, create diagrams, have customer approval, build and interface, add a database, test the system.

## 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?*

* Must be web-based accessible from any device connected to the internet.
* Must be multi-platform.
* Must load quickly without any major delays.
* Must be updated regularly whenever changes to requirements in the DMV are made.

#### 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?*

* Must run on all major platforms, Windows, Mac, Android, etc.
* Data and security should be handled by a cloud service provider.

#### 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?*

* Users must create accounts and login to the system whenever they want to access it.
* Usernames are case-sensitive.
* System must inform the admin when a password needs to be reset, and when an account is cancelled so the admin can block the user from accessing the system.

#### 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 add/remove/modify features can only be made by modifying the code.
* IT officer must change code to adapt to platform updates.
* The IT admin is responsible for maintaining the system’s code. He is allowed to modify the existing code to keep the system running as it should.

#### 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?*

* Users must login by providing a username and password of an existing user.
* Data exchange between the client and the server by verifying access credentials.
* Only the Admin has full access.
* System security must be implemented by the cloud service provider.
* If there is a “brute force” hacking attempt the cloud service provider should detected, stop it, and notify the system admin.
* Forgotten passwords must be reset by the system admin.

### 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 store user information in a cloud-based database.
* The system shall verify user credentials at login.
* The system shall prevent any unauthorized access.
* The system shall communicate with the DMV system.
* The system shall display training options to users.
* The system shall update user information.
* The system shall accept payments from users.

### 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.)?*

* User login, online test progress, user information inputs, driver notes section, practice tests, online lessons, and driving lesson packages display.
* Student drivers may make, update, or cancel appointments. Pay for services. Have access to online driving lessons material. Accessible through either mobile or pc browser.
* System admin has full access and is able to reset passwords as well as to block accounts.
* IT officer has access to the code to make any necessary changes.
* The secretary can create new user accounts and process payments.

### 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?*

* It is not clear what forms of payments will be accepted and what online payment process provider will be used.
* It is not clear how much access will the IT officer have, and much access will the cloud service provider have.
* It is not clear how the system will link to the DMV.
* It is assumed that the users are student drivers.
* It is assumed that the user has access to a browser with a reliable connection.
* It is assumed that the users have basic technology knowledge to be able to login and navigate through the system’s interface.

### 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?*

* Less than four month to have a working system up and running.
* No budget specification.
* No specific technology requirements.
* No choice of cloud service provider or package.
* No feedback from users.
* No online registration form.

### 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.*

Chart, waterfall chart

Description automatically generated