# DriverPass Business Requirements

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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?*

* Provide online practice and training modules to prepare driving students to take a driver’s exam.
* A system for students to properly schedule physical hands-on training and driving lessons.

### 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 their system to provide driver training for new drivers to be better prepared for an exam at their local DMV.
* Training needs to be both online based courses and local driving lessons.
* Administration for controlling system wide account access.
* Front Desk for setting up customer appointments and handling phone calls, questions, and complaints.
* User account, set up by students for creating an account on the system that can schedule appointments and select online lessons.
* Driving Instructors are accounts for instructors to log student progress and notes.

### 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?*

* Objectives
  + Users can track status of booked appointments for hands-on drivers training.
  + Admin accounts can track both driving instructors and students.
  + Data needs to be accessible while offline. An option would be to download reports to be accessed later while offline.
* Goals
  + Online classes materials and practice test components including quizzes.
  + Scheduling of driving lessons.
  + System tracking logs all operations made to the system. (Accounts created, deleted, scheduled appointments, etc.
  + Users can create accounts online or with the physical office over the phone.

## 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?*

* It should automatically backup frequently every hour.
* Anything new from the DMV rules should come automatically.
* The system shall allow up to ten simultaneous driving appointments.

#### 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 client wants interfacing with the system to be at a minimum.
* Platform constraints should be limited to whichever the client is used to using or is using currently.
* A secure database to store user information such as login credentials. As well as basic information like name and phone number.
* The system will use this data for tracking purposes. Such as when a reservation is made, cancelled, and who modified it last.

#### 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 will be distinguished by information provided by either a phone call to be added to the system by a DriverPass employee, or by the user themselves online.
* Information will include first and last names, address, phone number, state, and credit card information.
* Input from the user should be accepted as-is with exceptions to special characters.
* IT should be notified if user data is corrupted or breached in some way.

#### 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 admin needs the ability to add or remove modules to the system. Such as removing unused driving appointment packages.
* Users should be able to make, cancel, and modify appointments from the web.

#### 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 will need to provide basic log in credentials for account setup.
* If a customer forgets their password, the system will automatically give the user an opportunity to reset their password.
* If an attempt to breach an account is made the system will send an automatic email notification alerting the user to change their 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 allow users to update reservation information.
* The system shall have toggleable modules that DriverPass has administrative rights to.
* The system shall maintain a database of active users. DriverPass has the authority to remove users when necessary.
* The system shall automatically receive updated information from local DMVs to maintain a clear and up to date curriculum.
* The system shall allow administrators to download key data.

### 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 must contain pages for online test progress; user information; driver notes; special needs; a driver photo, and the uploaded student photo.

### 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?*

* Online users have access to stable internet connection.
* When a user calls to make an appointment there will be an employee available to answer phone calls.
* Electricity is available for communication devices to function properly.

### 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?*

* New appointments can’t be made if electricity is lost.
* New appointments can’t be made if no vehicles or instructors are currently available.
* Learning materials will be unavailable if new compliance expectations aren’t updated in time.

### Gantt Chart

A graph with orange and gray squares

Description automatically generated with medium confidence