# DriverPass Business Requirements Document

## System Components and Design

### Purpose

* ­­The company DriverPass is starting a business in order to make driver training more accessible to people across the country. They see a steady rise in people unable to obtain their driver’s license due to a lack of proper training and limited access to current DMV rules and procedures.
* The client will provide online learning material and practice tests, as well as packages for in-person training sessions using one of their company vehicles.
* The client needs a system built that will include a website for customer interaction. It will also need a database and security to hold and protect customer information.

### System Background

* The DriverPass system must be connected to the internet continuously and data related to the customer must be updated instantly.
* The DriverPass website must be linked to the DMV website, and actively updated by the DMV, in order for the customer to have the most current driving information for their location.
* The system must be accessible on multiple devices and operating platforms.
* The management and staff of the system need to be able to download reports in multiple formats, in order to work on them offline.
* User privileges must be implemented on the system.
* System data must be audited/tracked, and activity reports need to be easily accessible and printable for the client.
* The System will require multiple identifiers for customer accounts and registration.
* The DriverPass system will utilize a cloud-based solution for data storage and data security.

### Objectives and Goals

* The DriverPass website will offer a unique experience designed by the client.
* The website will allow DriverPass customers to create an account and register with the company. They will also have the option to call the company directly or come in person to the main office and register for classes.
* The website will allow users to choose from multiple driving packages and allow them to choose a time and date for their personal two-hour lessons.
* The user will be able to make, cancel, or modify existing appointments.
* The user’s progress, personal scores, and driving notes will be recorded and monitored throughout each lesson. They will be displayed to the user so they can keep track of tasks and achievements.
* DriverPass will supply 10 company vehicles that will be used by customers who are scheduled for in-person driving lessons. Customers can schedule appointments to use the vehicles and can also request rides to and from lessons.

## Requirements

### Nonfunctional Requirements

#### Performance Requirements

* DriverPass will need to be a web-based program that will be accessible via the internet. It will use the standard TLS encryption at the port layer.
* The DriverPass application should not exceed a two second load time for the user.
* DriverPass will use a cloud-based solution in order to manage scalability as the platform’s traffic increases and decreases.
* New and existing customer data should be backed up and stored immediately upon any changes.
* The DriverPass system should be updated when new features are available, bugs are discovered, and when the DMV makes changes to its rules, policies, or practice exams.

#### Platform Constraints

* The DriverPass application should be accessible from all major platforms: Windows, Android (Unix), IOS, and Linux.
* The application must be accessible from a PC, mobile device, or a notepad/tablet.
* DriverPass will need an online E-commerce platform to handle online customer transactions.
* The application will utilize a cloud platform as a database to securely store private customer information and the customer’s progress in the program.
* The application will utilize a cloud platform to store business and software-related data.

#### Accuracy and Precision

* Each customer will need to create a user account based on their personal information such as first and last name, birthday, address, and social security number.
* Each customer will be required to create a username that is case sensitive and can include numbers or symbols. Each username must be entirely unique within the system.
* Each user must create a password that is associated with their account. The password is case sensitive. At least one number is required for a valid password and symbols are optional. The username and password are both required for access to a user account.
* Customers will have different access levels depending on the driving package that is selected. The DriverPass application must be able to distinguish between the different customers.
* If a customer has 3 failed login attempts in a row, they must request to change their password or wait an hour before attempting to login again. If 12 failed attempts happen within a 24-hour period, The IT administrator must be contacted.
* When an account is accessed that is associated with administrative privileges, extra credentials will be required, including employee Id number and employee pin.

#### Adaptability

* Customers should be able to create and permanently delete their account without affecting the system.
* Customers should be able to reset their passwords via an email link.
* Administrative access will be required to reset a password when the customer doesn’t have access to the verified email address.
* The system should be able to adapt to operating system updates by the user’s device.
* The IT administrator will need to be able to block or disable a customer’s account if necessary.
* The system should adapt to updates by the DMV when received.
* The cloud platform must backup and secure customer and company data when it is received by the system or changed by the users of the system.

#### Security

* The customer’s username, and the password associated with that account, must be used to access an account.
* For administrative access, an additional employee Identification number and pin code will be required for access to the system.
* SSL/TLS will be implemented in the API to ensure port level security.
* A trusted E-commerce platform will be used to ensure payment transactions are secure and handled in a timely manner.
* A cloud platform will be used to back-up and secure customer and company data.
* End-to-end encryption will be used when communicating with the cloud provider and between connections, devices, and accounts within the company.
* Users will be allowed three failed login attempts before they are required to wait an hour and try again. After 12 failed attempts within 24 hours, the IT administrator will be contacted, and the company will need to reach out to the customer via email or phone call. If no contact has been made within 48 hours, the customer may attempt to login again.
* Customers may request a password change via a link sent to their personal email address. If they do not have access to the registered email, they will need to contact the company and have the IT administrator reset their password. The customer will need to be able to provide all of the personal information associated with the account before the administrator initiates a reset.

### Functional Requirements

* The system shall validate user credentials when logging in.
* The system shall allow customers to pick a driving package based on the level of services needed.
* The system shall allow customers to schedule, modify, and cancel driving lessons with an instructor.
* The system shall allow customers to take practice tests online.
* The system shall allow customers to check their progress within the program.
* The system shall be updated by the DMV website when changes are made to their policies, or when they distribute new practice tests.
* The system shall allow the owner of the company to download reports generated by the system.
* The system shall allow the owner to disable, customize, remove, and add driving packages.
* The system shall require administrative access to block a customer account.
* The system shall require administrative access to reset a customer’s password that cannot access their personal email.

### User Interface

* Users can access the DriverPass application via an internet browser or a phone application. The phone app for DriverPass will be available on the Android and IOS market.
* The user interface will need to be available in multiple languages.
* The user interface must have accurate information concerning local DMV policies and guidelines based on the user’s location.
* The interface should display the user’s personal information alongside the user’s test progress. It should also display completed tests and tests that still need to be taken.
* The interface should also allow the user to document driver notes as they progress through the program. This will allow them to track the hours they earn when driving with an instructor and add comments when needed.

### Assumptions

* The users of the system have access to the internet.
* The customer is of legal age to be driving and can legally obtain a driver’s license.
* Information from the DMV is accurate and up to date.
* 10 available cars for scheduled driving lessons should be enough to handle reservations at each available location.

### Limitations

* The system only provides driving instructors and driving lessons in designated locations.
* The system only allows customers to be picked up and dropped off in the same location when requesting a ride to their lessons.
* The system will not backup data or update if it is not connected to the internet.
* Users must be connected to the internet to access the system and their account.
* The project has a five-month time limit.
* The project team is small in size and is currently in the process of training a new team member.

### Gantt Chart

A screenshot of a computer program

Description automatically generated

A screenshot of a computer

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