Brandon Porter

Temp1

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## System Components and Design

### Purpose

* The objective of this project is to create and implement a comprehensive system for DriverPass, drivers training company. The goal is to overcome the deficiency of effective tools currently accessible to students with the hopes of enhance their success in passing their driving tests. This system will grant the ability to do online practice tests that will advance learners with on-the-road training to better equip them for their driving license examinations.

### System Background

* DriverPass endeavors to provide a comprehensive range of services to enhance the success rate of students in successfully passing their driving tests. This will show online classes, practice tests, and on-the-road training for learners. The program allows users to conveniently access their data at any location, both online and offline, while incorporating functionalities for efficient reservation management, activity tracking, and access to the most updated regulations and policies that are mandated by the DMV. The system will have diverse user roles, this will contain different access privileges, this will give a user friendly and compatible interface that will function seamless navigation and interaction with users.

### Objectives and Goals

* Develop a well written platform that offers easy to use driving license test preparations using virtual classes and practice tests.
* Provide a structured on the road program that will train the user by seasoned drivers and enhance practical driving skills and conditions.
* Offer activity tracking, giving the user the ability to measure their progress and show any strong points as well as weak points.
* Have a user-friendly system that will allow users to schedule appropriately for their lesson reservations. This would allow them to respectfully create modify or cancel any meetings.
* Follow the latest DMV rules and regulations and maintain alignment there on and always having the latest and most up to day information.
* Maintain strict and secure security measurements to safeguard the user information and establish differentiated user roles with respectful access rights for data privacy and security.
* Have a user friendly but intuitive and visually satisfying user interface. Allowing for easy navigation, interaction, and relaxed friendly experience.

## Requirements

### Nonfunctional Requirements

#### Performance Requirements

* The website is going to be web based, it is going to have a fast-running system in that it does not cause issues for user’s wen operating or navigating the website, it should be seam less and allow the user to function it with no issue and easy to use. The system should update whenever the user makes an update. System should be updated at any point for new features.

#### Platform Constraints

Linux would be a good platform to run on, however Windows is a more widely used platform, compatibility and easy of use as well as training purposes and maintenance would be better on window. This is a little up in the air for me.

* In this system it is using the cloud to manage all the security this takes care of the databases required for the back end.

#### Accuracy and Precision

* The website should allow each user to create a unique username and password during their initial visit. The login credentials input should be case-sensitive to ensure accuracy. Additionally, to enhance security and prevent unauthorized access, the system should implement multi-factor authentication.
* The system should have real time monitoring in case of glitches or other issues that can be reported immediately to the website administrator.

#### Adaptability

* Ability to make changes like user info and modifications without code being changed,
* As more features become needed or wanted, there will be slow add ones to the platform over time, again on case-by-case basis.
* When changes need. To be made the IT admin should have full access.
* We will ad platform updates as the company chooses to modify the website.

#### Security

* Require username and password from the user to login. Have multifactor authentication as well.
* The cloud will bear the responsibility of the data exchange between the user and the server.
* The system should disable the account after four incorrect login attempts. This wil prevent potential attacks.
* If password or username is forgotten, the user will be prompted to request a change where a reset link will be sent to their email on file.

### Functional Requirements

* The system will validate user credentials when logging in.
* will book appointments that are made by the user.
* provide practice tests, and classes.
* Allow the driver to see the customer he is with
* There will be 3 different driver packages.
* The system will have to run quickly and be efficient for succuss.
* There will be custom access for each user based on their privileges.
* The user will be able to see the test and process they have completed.

### User Interface

* Online test progression, information of the user, like name, address, dates and ect.
* The interface will also have driver notes and Special needs.
* Driver photo and Student Photo. Will have the option to make reservations.
* Allowing the drivers to make updates as needed.
* Ability to communicate with the interface through a mobile device or other devices capable to connect to the internet and that an app is designed for.

### Assumptions

* Lack of budget, this means we assume that the cost is all with in that budget.
* Cost of the Linux or windows and their cloud use as well as the security resources wil all be in the budget and obtainable.
* We all so are assuming easy access and that based on our time line there is no issues in this process and the time line 9Gantt) chart will be no issue.

### Limitations

* Based on the transcript there is not a lot of people involved with this process. We are assuming that the transcript names are the only people who are working on the project.
* We do not have a budget and we do not have more people and our time line is 4 months.
* This all points to typical limitations and we don’t have a listed resource to refer to when or if issues occur.

### Gantt Chart

A graph with a number of days and months

Description automatically generated