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CS 255 Business Requirements Document Template

System Components and Design

Purpose

• The client for this project is a DriverPass. DriverPass wants to provide customers with both on-the-road driver training and online courses. They want a system that will handle appointment sheduling and online training for learning drivers.

System Background

• DriverPass believes that there is an opportunity to provide learning drivers with better training than what is currently available. They believe that with their system, students will be able to pass driving exams much easier. The client wishes to provide online classes and practice tests, as well as on-the-road training. On top of providing a great service to their customers with this system, they wish to make it easier to manage reservations.

Objectives and Goals

• The system’s data should be able to be accessed from any device with an internet connection. For security, they would like to have logs with information about the employee who modified reservations. Customers should be able to make reservations online. Users should be able to easily track which driver is associated with each appointment. There are 10 cars with 10 drivers. There are three packages that can be selected for each appointment. The employees of DriverPass should be able to disable a package if they so choose. When scheduling appointment the user should be able to enter information about the customer and where they would like to be picked up and dropped off. The user who manages the system should be notified to have the system updated if the DMV makes any changes to their testing policies/rules/sample questions. The system will be ran using a cloud service, instead of a physical server. The client provided a design template to base the interface off.

Requirements

Nonfunctional Requirements

* Communiction with the DMV servers to notify the system when to update.
* Automatic password resets
* System backups through a cloud service
* Security provided by a cloud service
* The system will be connected to a bank to process payments.

Performance Requirements

* The system will be ran as a web based application, so that it can be accessed from anywhere.
* It shouldn’t take longer than 5 seconds to complete each task.
* The system needs enough bandwidth to display online course content to the users quickly.
* It should be updated everytime the system is notified by the DMV that are changes to their testing.

Platform Constraints

* + Cloud service will be used instead of a physical server.
  + The system will run on Windows Server, using Microsoft’s cloud service Azure.
  + A database will be required to store user information and online course content, this will be handled with Azure.

Accuracy and Precision

* + There will be three different types of user accounts. Administrator, Employee and Customer, each with their appropriate priveleges. The administrator will have full access to the system. The employee account will be able to access customer records and make reservations for customers. The customer account will be able to sign up for reservations and online classes.
  + Passwords will be case sensitive. Usernames will not be case sensitive.
  + Admin should be informed whenever there are issues accessing online course content or making reservations.

Adaptability

* Customers will be able to create/modify/delete their accounts online.
* The system will adapt to updates given from the DMV. The DMV may update their rules, policies, or sample questions.
* The IT Admin requires the ability to disable modules and manually reset passwords.

Security

* To login, the user is required to use their email or username along with a password
* The system’s security will be provided by Microsoft’s Azure.
* If multiple failed login attempts are made on an account, the user will be required to contact the admin by email or phone in order to reset their account.
* The user will be able to automatically reset their password provided they have access to the email associated with the account.

Functional Requirements

* The system shall allow users to access data from any device with an internet connection.
* The system shall allow customers to make reservations online.
* The system shall allow employees to manually make reservations for customers.
* The system shall provide customers with three packages.
* The system shall allow customers to access online course content.
* The system shall allow customers to take practice tests.
* The system shall allow the admin to disable packages.
* The system shall allow the admin to track information about reservations.

User Interface

* The interface shall display online test progress, driver/student photos, customer information, notes from the driver and special needs information about the student.
* The inteface will be usable on both mobile devices and desktop web browsers. Each will require slightly different layouts to accomodate different screen sizes.
* The employee interface will allow the employee to view information about the customer and their reservations.
* The customer interface will allow them to create/view their reservations and access online course content.

Assumptions

* The users of the system have internet access.
* Security and storage will be provided by the cloud service.

Limitations

* The system will require further development to add or modify modules.
* Without internet access users won’t be able to access their data.

Gantt Chart

