German University in Cairo
Media Engineering and Technology
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Databases I, Winter 2021
Project Description
"PostGrad"
Milestone 3
Deadline: 17/1/2022

Requirements:

In this milestone, you are required to implement a website that connects to your database to perform the different functionalities described in the project.

Deliverables:

You are required to submit the following:

- **.zip** file having the following documents:
    - Source code of the submitted website: All the source code files needed to run the project.
    - SQL Script of the implemented Database: SQL file containing the script of the data of the database that you have implemented on SQL Server (submit the script (Milestone 2) if you haven't modified anything).
    - A PDF file containing :
        * Team members' names.
        * Team members' application numbers.

Read the following carefully:

- The deadline of submission for this milestone is Monday 17th of January at 11:59 p.m.

- In this document, the website is divided into components. All components should be **integrated** together.

- There is a 5% bonus for implementing at least 2 extra features that were not mentioned below.

Web Application Components

Note that:

a) You have to show whether any action on the website was successful or not. In case of any unsuccessful action, you need to notify the user with the reason and the steps needed to correct the action.

b) If a stored procedure/function from Milestone 2 was incorrect or missing any input/output, you have to correct it before using it in this milestone.

c) The items of each component should be integrated with each other. Furthermore, all components should be integrated together. In other words, we should be able to navigate through your website from one functionality to another by interacting with the web pages of the website and NOT by changing the URL.

General Component Homepage:

a) Register to the website
   - I should be able to register as customer or as an employee.

b) get all available customers.

c) get the number of available vehicles.

d) get the total number of rents that already occurred.

e) login using my email and password (the landing page is different for an employee, a customer (who is currently not renting a vehicle) or a customer (who is currently renting a vehicle)).

1. Registered customer currently *not* renting any vehicles :

In this component you are required to deliver all pages of the application that holds the following functionalities:

a) View my profile that contain all my information and be able to update any of the information including adding telephone number(s).

b) Add or delete an online payment info.

c) List all available vehicles and be able to order them by brand, class or rate. You can get for each vehicle its average rating and its current location.

d) List the vehicles that were never rented before.

e) View all available insurances together with the accidents covered by them and be able to sort them by rate.

f) Rent a vehicle for a specified time-frame.

g) View all my previous accidents and any pending payment info if any.

2. Registered customer currently renting any vehicles :

In this component you are required to deliver all pages of the application that holds the following functionalities:

a) Submit an accident with the information.

b) View all Extra items that are available (and be able to sort them by rate) and be able to rent them. Be able to pick the minimum Extra item of each type.

c) Evaluate the currently rented vehicle by giving a value from 0 to 10.

d) Update the location of the vehicle (gps location). Be able to submit a parking location (meaning that the vehicle is parked and returned by the customer).

e) Update the currently rented vehicle with the kilometers left. (in case of a scooter update the battery level or otherwise the motor attribute)

3. Employee:

In this component you are required to deliver all pages of the application that holds the following functionalities:

a) View and update my profile.

b) Add a newly acquired Extra item, Vehicle, location or insurance.

c) Update the status of any vehicle.

d) List all currently rented vehicles or customers renting vehicles.

e) List customers with their due bills if any.

f) Update an Extra item to a specific rate or increment all Extra items of a specific type by a specific value.

g) Issue a bill for an accident together with its installments for the customer responsible for the accident.

h) Delete payments with an expire date earlier than a specific date.

i) View customers who have rented all vehicles.

j) Provide a gift-card to a customer.

k) List vehicles that are either unavailable, have a battery level 0 or less than 30 kilometers for their motors.