Project

Draft Requirements Specification

Description

Master Stephanos, a Taekwondo instructor needs a database to keep track his hundreds of students. The system requirements are the following:

- There is only one instructor who teaches all classes and he is the only user
- Student data are stored in the database. This includes: their name, date of birth, the date they joined the school, their mobile number, email, and address.
- The school wants to track also the students' parents (Mother and Father). Most students live with their parents but NOT all students have parents (some students might be adults so there is no need to keep track of their parents). We need to store also parents' mobile phone and email address. Parents may also be students.
- Students should not be deleted from the system but they should be either Active or Inactive (for those who drop out).
- The instructor wants to keep track of his inventory, such as, belts, uniforms, weapons, etc. These should include the product name, product description, cost price and selling price.
- Students pay fees for membership, tests, purchasing products, etc. The system must be able to keep track of all money received from students. The system should be able to show this information for any given date, e.g. by month or within a range such as, January 1-June 30th 2019.
- A class is offered at specific times and days of the week. For example, one class might be on Mondays and Thursdays from 5:00-6:00 pm is an intermediate-level class. Another class might be on Mondays, Wednesdays and Fridays from 6:00-7:00 pm is a beginner-level class, etc. These provided here are only as an example.
- Students may attend any class at any level during each week so there is no expectation that any particular student will attend any particular class session. Therefore, the actual attendance of students at each individual class meeting must be tracked.
- Each student holds a rank in the martial arts. The belt color and the date the student awarded each rank needs to be kept in the database. A given rank may be held by many students. While it is customary to think of a student as having a single rank, it is necessary to track each student's progress through the ranks. Therefore, every rank that a student attains is kept in the system. New students joining the school are automatically given a white belt rank (default).

- Sample ranks (the user can enter any ranks in the Ranks table) are:
 - 1. White
 - 2. Yellow
 - 3. Green
 - 4. Blue
 - 5. Red
 - 6. Black

Group Size

Teams should be from 1-3 people from any section

Deliverables

You are asked to provide:

- 1. A *Technical Report* in PDF format with the following information:
 - the name, student number, and section number of each team member
 - instructions on how to run the system
 - provide usernames/passwords (if any)
 - A dependency diagram in 3NF
 - A complete Crow's Foot ERD or a UML Class Diagram
- 2. A 3-5 min. video showing your system/front end (Use a screen recorder video NOT your mobile)
- 3. The complete system using <u>any</u> programming language for the interface and <u>any</u> DBMS of your choice. This includes all system files including source code. Examples include (not limited):
 - Java & Oracle
 - ASP.NET & MSSQL
 - .NET & MSSQL
 - PHP & MySQL

How to Submit

A team representative must upload on Blackboard the above in a ZIP format. In the ZIP file, there should be the *Readme* file containing the (1) from above (report) and one folder containing the (2) from above (video). The ZIP file should be saved with the name of the team representative as *LastName_FirstName*, e.g. Smith_John

<u>NOTE</u>: If the file is too large for Blackboard you may upload your files on Google Drive and add the link on Blackboard before the deadline. Also send me an invitation to see the file.

Deadline

June 16

Assessment

Functionality/Database Structure / Interface 15%

Tech. report 5%

Video 5%

TOTAL 25%

Note: The instructor reserves the right to deduct any points for not following the right instructions.

*** Points will be deducted for failing to follow the above instructions or for late submissions ***