German University in Cairo Media Engineering and Technology Prof. Dr. Slim Abdennadher

> Databases I, Winter term 2016-2017 Project Description "Schools' Network!" Milestone 4

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, named after your team code, 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 both the data and the schema of the database that you have implemented on SQL Server (submit the old schema if you haven't modified anything).
 - A PDF file containing:
 - * Team members' names.
 - * Team members' tutorial groups.
 - $\ast\,$ Team members' application numbers.

Submission guidelines:

- The deadline of submission for this milestone is Monday the 5th of December at 11:59 p.m.
- No late submissions will be accepted under any circumstances.
- In case no one submitted from a certain team the whole team will be assigned a zero in milestone 4.

Read the following carefully:

- In this document, we divided the website into five components. The first component (User Component) is a mandatory one, which means all the teams should have it in their project. For the remaining four components, each member of the team will be assigned to one component to implement.
- Each member of the team is required to submit a form choosing the component that you will be working on, latest by Saturday 26th of November at 11:59 pm: https://goo.gl/forms/mTVmHJkN1vzgm2E53
- In case you didn't submit the above form, your evaluation grade will be for all the components of the milestone.
- No team members can be assigned to the same component.

- Each team member will be evaluated and graded according to the component he/she was assigned to.
- If your team is less than four member you don't have to cover all components. For example, if you are only 3 members, then you have to choose only 3 components where each member will be assigned to a component, in addition to the mandatory component.
- 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.

Web Application Components

User Component:

In this component you are required to deliver all pages of the application that holds the following functionalities for any **signed-in or not signed-in user**:

- 1 Sign up for the following types of users of the System (Teacher, Student, Parent). You need to consider the difference in attributes between the three types of users.
- 2 Login for all types of users of the system (Teacher, Student, Parent, Administrator).
- 3 View a list of all available schools on the system categorized by their level (Elementary schools, Middle school, High schools).
- 4 Search for any school by its name, address or its type (national/international).
- 5 View the information of a certain school (after searching for it or after choosing it from the list of available schools). We can also view the reviews written about the school and the announcements.

Component 1 - Administrator component:

In this component you are required to deliver all pages of the application that holds the following functionalities for any **signed-in administrator** in the network:

- 1 View a list of unverified teachers who signed up for teaching in the school he/she is responsible of. Then, verify that teachers by assigning a unique username and password for them.
- 2 View a list of applications submitted by parents to their children in the school he/she is responsible of, then accept or reject it.
- 3 View a list of newly enrolled students in the school he/she is responsible of for verification by assigning to them a unique username and password.
- 4 Edit the information of the school in the school he/she is working in.
- 5 Post announcements with the following information: date, title, description and type (events, news, trips ...etc).
- 6 Create activities and assign every activity to a certain teacher. An activity has its own date, location in school, type, equipment(if any), and description.
- 7 Assign teachers to courses that are taught in my school only.

Component 2 - Teacher component:

In this component you are required to deliver all pages of the application that holds the following functionalities for any **signed-in teacher** in the network:

- 1 View a list of courses' names taught by him/her, listed based on their level then their grade.
- 2 Post assignments for any course taught by him/her. Every assignment is assigned to one course and has a due date and content.
- 3 View a list of assignments per course. For each assignment he/she can view the students' solutions ordered by students' ids. He/she can further grade each solution.
- 4 Write a report about a student in a specific course. The report contains his/her comments.
- 5 View a list of questions for a certain course along with the name of the student who asked it, and provide an answer to them one by one.
- 6 View a list of students that a teacher teaches categorized by their grades and ordered by their names (first name and last name).

Component 3 - Parent component:

In this component you are required to deliver all pages of the application that holds the following functionalities for any **signed-in parent** in the network:

- 1 Apply for one of his/her children in any school by filling in an application with the information of the child e.g. social security number (SSN), name, birthdate, and gender.
- 2 View a list of schools that accepted his/her children categorized by child (if the parent has more than one child). He/she can choose only one school from them to enroll his/her child in.
- 3 View reports written about his/her children by their teachers. The report should display the issuing date, teacher's name and comment. The parent can then reply to the report.
- 4 View a list of teachers that teaches their children. This page should also show the average rating for that teacher. The parent can also rate any teacher of them, so that the average rating displayed would be updated.
- 5 View the schools of his/her children and write a review about it.
- 6 View the reviews he/she already wrote and delete any of them.

Component 4 - Enrolled student component:

In this component you are required to deliver all pages of the application that holds the following functionalities for any **signed-in enrolled student** in the network:

- 1 View a profile displaying information about the student. The student can then update any of his/her information except for the username.
- 2 View a list of courses' names assigned to him/her based on his/her grade and ordered by name.
- 3 He/she can then choose a course to post a question about it, where a teacher would later answer.
- 4 View all questions asked on a certain course along with their answers.
- 5 He/she can then choose a course to view assignments posted about it and submit a solution for it.
- 6 View the grade of the assignments he/she solved per course.
- 7 View a list of activities offered by the school (all the information about the activity and the teacher supervising it). The student can then join any activity on the condition that not to join two activities of the same type on the same date.
- 8 For high school students only: A student can view a list of clubs in his/her school and join any of them.