German University in Cairo Media Engineering and Technology

Dr. Mervat Abuelkheir

Databases I, Winter 2023 Project Description Milestone 3 Deadline: 16/12/2023

In this milestone, you are required to implement a web application with a user interface that connects to your already implemented database in the previous milestone to perform the different functionalities described in the project.

Deliverables:

You are required to submit the following:

- .zip file, named after your team number, 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)).
 - A PDF file containing:
 - * Team members' names.
 - * Team members' tutorial groups.
 - * Team members' application numbers.
 - * Team members' chosen component.

Submission guidelines:

- The deadline of submission for this milestone is Saturday 16th 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 3.

Read the following carefully:

- In this document, we divided the website into three components.
- Each team member is required to choose a component/sub-component that he/she will be working on and add it to the PDF file as mentioned in the Deliverables.
- In case a team member didn't submit the above form, his/her evaluation grade will be for all the components of the milestone.
- Each team member will be evaluated and graded according to the component he/she was assigned to.

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) 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.
- **1.Student Component :** In this component you are required to deliver all pages of the application that holds the following functionalities for any signed-in Student: This component is divided into two sub-components. One for each team member.

Student Component Part 1:

- a) Register to the website
 - I should be able to register as a student
- b) login using my user ID and password.
- c) add my telephone number(s) as a student.
- d) View all optional courses in the current semester.
- e) View all available courses in the current semester.
- f) View the required courses within the current semester.
- g) View the missing courses.
- h) Sending a course request.
- i) Sending a credit hour request.

Student Component Part 2:

- a) View his/her graduation plan along with his/her assigned courses.
- b) View the upcoming not paid installment.
- c) View all courses along with their exams details.
- d) Register for first makeup exam. You should show the output response.
- e) Register for second makeup exam. You should show the output response.
- f) View all courses along with their corresponding slots details and instructors.
- g) View the slots of a certain course that is taught by a certain instructor.
- h) Choose the instructor for a certain course.
- i) View all details of all courses with their prerequisites.

2.Advisor Component:

In this component you are required to deliver all pages of the application that holds the following functionalities for the logged in Advisor. This component is for only one member.

- a) Register to the website
 - I should be able to register as an Advisor.

- b) login using my user ID and password.
- c) View all his/her advising students.
- d) Insert graduation plan for a certain student.
- e) Insert courses for a specific graduation plan.
- f) Update expected graduation date in a certain graduation plan.
- g) Delete course from a certain graduation plan in a certain semester.
- h) View all students assigned to him/her from a certain major along with their taken courses.
- i) View all requests.
- j) View all pending requests.
- k) Approve/ reject extra credit hours request.
- 1) Approve/ reject extra courses request.

3.Admin Component:

In this component you are required to deliver all pages of the application that holds the following functionalities: This component is divided into two sub-components. One for each team member.

Admin Component Part 1:

- a) login using my user ID and password. You should have one admin credentials for login hardcoded.
- b) List all advisors in the system.
- c) List all students with their corresponding advisors in the system.
- d) List all pending requests.
- e) Add a new semester.
- f) Add a new course.
- g) Link instructor to a course in a specific slot.
- h) Link a student to an advisor.
- i) Link a student to a course with a specific instructor.
- j) View all details of instructors along with their assigned courses.
- k) Fetch all semesters along with their offered courses.

Admin Component Part 2:

- a) Delete a course along with its related slots.
- b) Delete a slot of a certain course if the course isn't offered in the current semester.
- c) Add makeup exam for a certain course.
- d) View details for all payments along with their corresponding students.
- e) Issue installments as per the number of installments for a certain payment.
- f) $\overline{\text{Update}}$ a student status based on his/her financial status.
- g) Fetch all details of active students.
- h) View all graduation plans along with their initiated advisors.
- i) View all students transcript details.