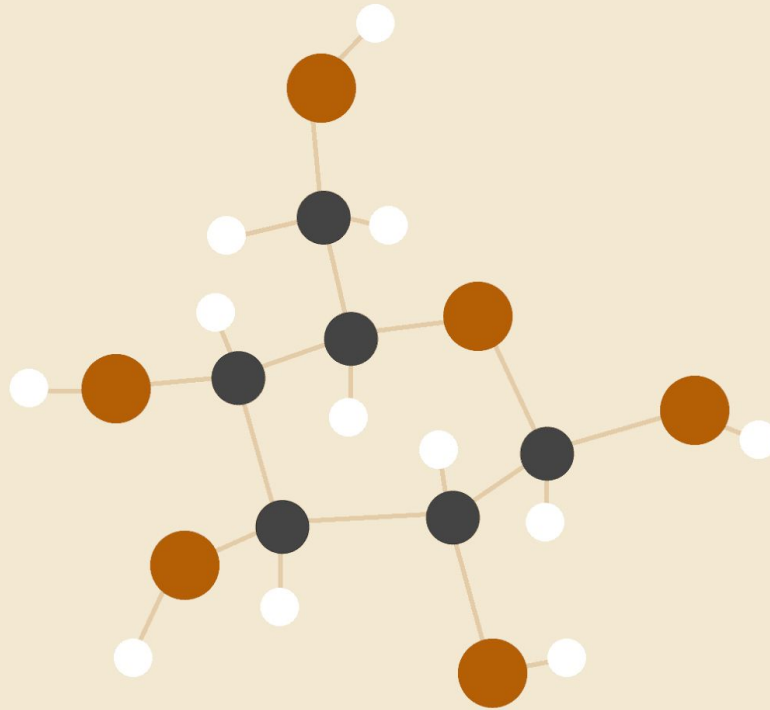# ENGR PROJECT

Supervised by: Metehan Abi

18.05.2020
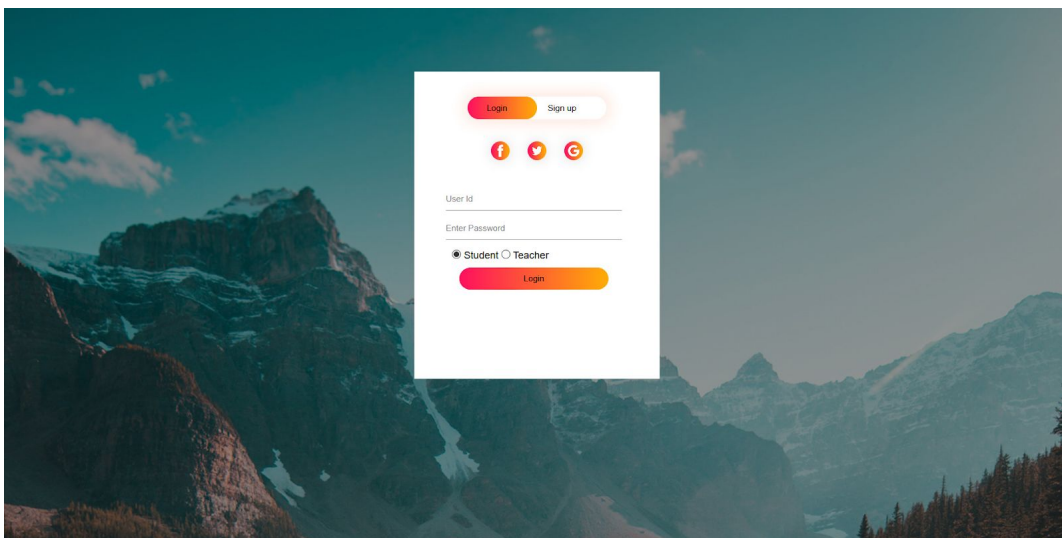Omar
Anas
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ABSTRACT

Nowadays the demand for new technologies as web-based educational programs remarkably have been increased. Learning Management System (LMS) satisfies the desires of the teacher in achieving the educational purposes such as communicating with students and organizing course contents. The program tries to offer reasons of success and ease of handling. The model helps to examine the noted usefulness and the information and system quality.

BODY

The API contains mainly (eight) pages-website; Login and Registration, Section Change, Student Course, Student Dashboard, Student My Courses, Teacher Course, Teacher Dashboard, Teacher My Courses. In addition, the database is the link between the aforementioned pages and it has seven tables which contains specific parameters and it will be mentioned in detail in the Body Section.

Login and registration page

Login and registration page: satisfies the authentication in order to permit the user to enter the website using email and password relating to the login option whereas sign up option creates a new student that doesn't have the access to login previously. Two types of users can be involved in the login process (student and teacher) and only students can be involved in the registration process.

Using the radio button we determine which page to login, student or teacher. The sign up page contains Name, Email, Student Faculty, Student Department, Password, and Password Confirmation.
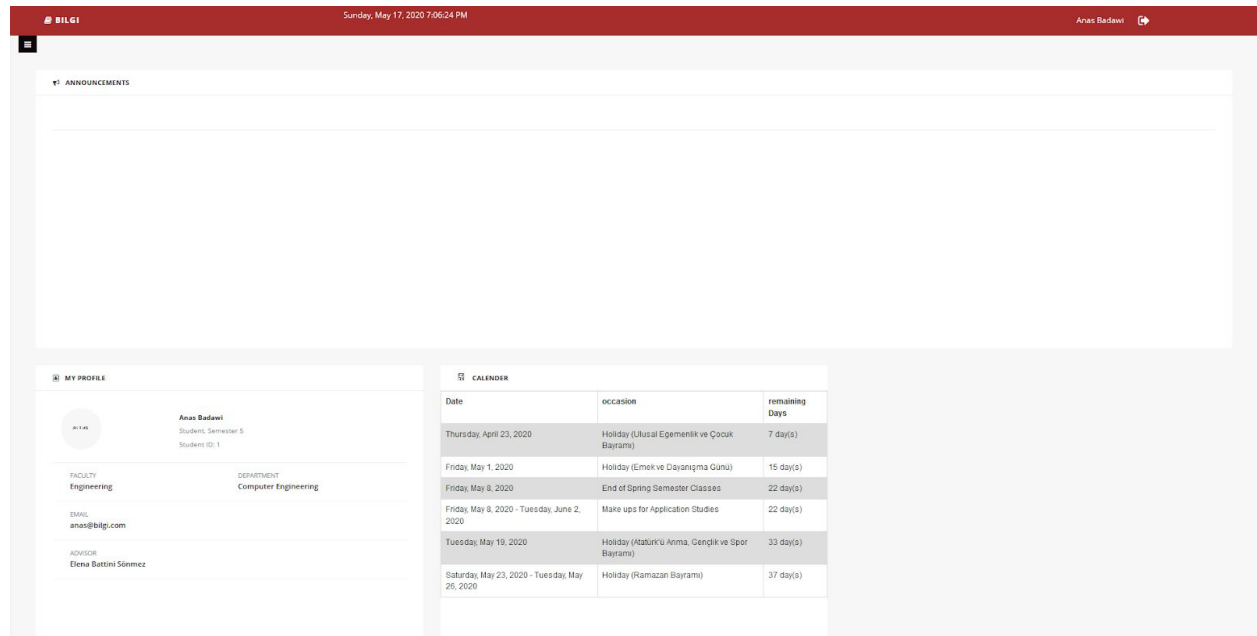
***************database******************

for the database part, we have a table for students contains six columns of data they are student description information { id-name-department-faculty-email-password }after checking student radio button is pressed

the MySQL query will bring the information from the database if the student email and the password are correct the student will enter the dashboard, otherwise the request will be denied

 if the selected radio button was the teacher the process will be the same with the teacher's information table in the database

Student Dashboard page

Student Dashboard page: contains three parts, announcements that has been written by the teacher, profile of student including the name, id number, faculty, department, email, advisor, profile picture, and eventually current semester, and the academic calendar that has holidays and the important events.

***************database******************

the dashboard page is connected to two tables the first is the announcement table in order to show the student announcement the table containing the information of the announcement {id-subject -description-time -course id- teacher id }

the second is the student table for displaying the student information in the profile section

Student My Courses page

Student My Courses page: displays the student's courses that are taken and also can add new ones, in addition to course code, course teacher, course credit, and lastly course lecture time and **by pressing on course name or course code you could access Student Course page by passing course id in the header.**

***************database******************

in this page courses section bringing the information from the courses table from the database which contains by default number of courses each course has six columns {id -code -name-credit-date-teacher}

the teacher is represented by a unique number

Student Course page

Student Course page: information of the student course appears in detail and it has 3 parts: firstly, weekly content to be followed by the student that could be downloaded. Secondly, the grading system helps the student to know the distribution of the marks and passing minimum requirements for participation, midterm, and final. Thirdly, grades, and attendance helps the student to follow the status of the course such as passed or failed that are being added from the teacher side.

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***************database******************

 after the teacher fills the marks of the student in the form. it will be stored in the database in grades and attendance table which contain five columns {course id- student id -midterm grade-final grade- attendance}

Section Change page

 Section Change page: helps the registered student to change the section regarding the available time for a specific course and each course has three sections that any student could choose one of them. Moreover, optionally the student can write the reason for changing the section to the teacher.

and the second part of the page contains a table that displays a quick review of the course lecture schedule.

***************database*******************

in order to change the section, the student should be registered in the course in the database table which contains three columns: student id, courses an array of the courses the student is enrolled in, course section which is also an array has the same number of elements as the courses.

each number of the courses has a section number 0 for the first section 1 for the second 2 for the third, if the number of the course section is changed it means the section is changed correctly

Teacher Dashboard page

Teacher Dashboard page: has three sections. Firstly, add announcement is to create an announcement by teacher and appear in each registered student account relating to a certain course. Secondly, the academic calendar has holidays and important events.

Thirdly, my profile declares the photo if it exists, teacher name, teacher id, faculty, email, and finally department.
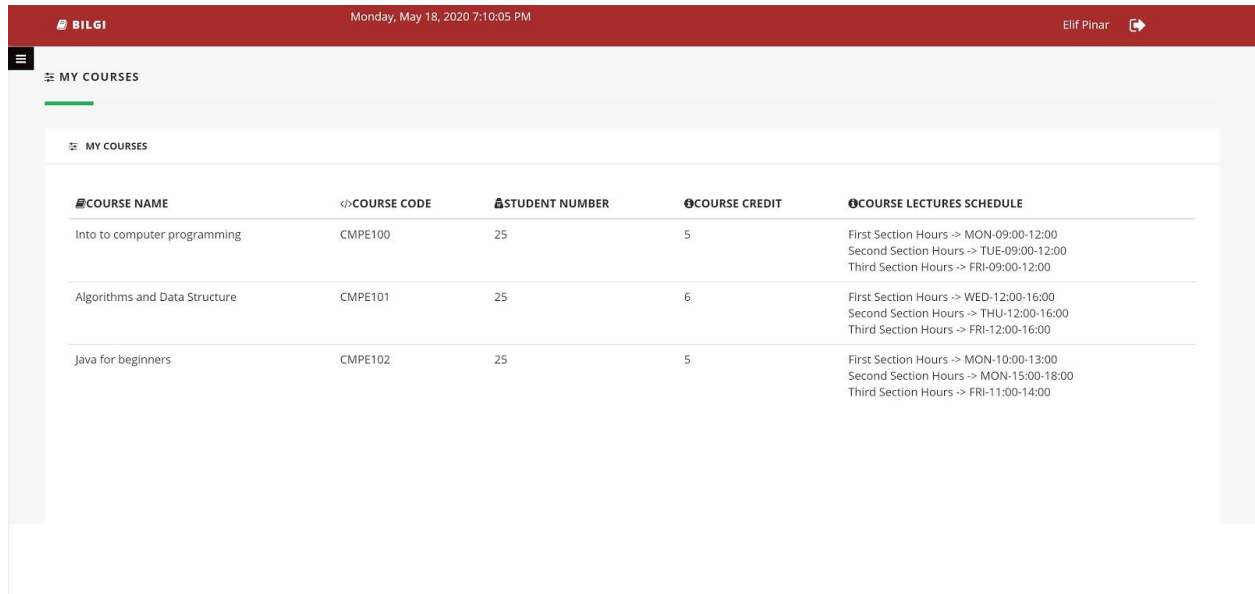

**************database******************

the teacher dashboard page is connected to two tables the first is the announcement table in order to let the teacher create a new announcement into the table containing the information of the announcement {id-subject -description-time -course id- teacher id }

the second is the teacher table for displaying the teacher information in the profile section

Teacher My Course page

Teacher My Course page: has the courses information that the teacher registered to which contains the course name, code, students number (enrolled in certain course), course credit, lastly course lecture schedule with the time and **by pressing on course name or course code you could access the Teacher Course page by passing course id in the header.**

***************database******************

in this page courses section bringing the information from the courses table from the database which contains by default number of courses each course has six columns {id -code -name-credit-date-teacher}

the teacher is represented by a unique number

Teacher Course page

Teacher Course page: has three parts. Firstly, weekly content contains the files that the teacher wants to provide in the course.

Secondly, adding records helps the teacher to grade the student attitude during the year and the calculations should be taken under consideration. Thirdly, grades and attendance visualizes the record result as a row.

***************database*******************

After the grades are entered by the teacher it will be saved in the database by five tables which they are {course-id, Student-id,mid-grade,final-grade,attendance}, this table is used in the student's my courses page so the student can see his grade and the result of the course

SOFTWARE TOOLS

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HTML: create web page

CSS : it is used in order to style the page

bootstrap for some styles and responsive website

JavaScript to make the website dynamic

jQuery for sidebar toggling

PHP to handle the communication with Database

pure MySQL for query, insert, create and update into Database

font awesome for adding icons

CHALLENGES

- Database creation and connection.
- Update existing values in the database.
- Storing user data by sessions through the website.
- Passing parameters through headers.
- Creating section change in frontend and backend
- Managing the grade system between students and teachers.
- Frontend styles conflict.