

Ahsanullah University of Science & Technology



Course No : CSE 3104

Course Title : Database Lab

Project Title

Tutorial Website

Project Members

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SUBMITTED TO

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Project Abstract

Tutorial Website is a place where the students and tutors can get everything he or she needs. Student can take any courses and tutor can teach different types of courses.

Project Idea

It is a database management system project which runs upon a relational database. Here we use mysql. By this project a user can sign up and sign in our website. There will be two different type of users who are students and tutors. There are information for every user. A user (in database we say user as student) can take different types of courses from the course list. A tutor can teach different types of courses. Every course also have some content where different types of lectures are defined. There will be also a comment part where a user and tutor specifically review about course. A user also comment about any things want to need and a tutor also reply this comment. Here our user view interface are show in netbeans using java language.

ER Diagram



Fig: ER Diagram for Tutorial Website

Standard Queries

1. Find out the course information whose course name starts and ends with D.

Ans : `SELECT * FROM course WHERE course_name LIKE 'D%D';`

2. Show the total number of course hour in descending order for each department

Ans : `SELECT course_name, sum(course_hour) as total FROM course GROUP BY course_name ORDER BY total DESC;`

3. Find out the number of user secured each.

Ans : `SELECT grade, count(grade) FROM takes GROUP BY grade;`

4. Find out the name of the user who have taken more than CSE course.

Ans : `SELECT user.username
FROM user INNER JOIN takes
ON user.user_id = takes.takes_id
INNER JOIN course ON course.course_id = takes.course_id
WHERE course.course_dept = 'CSE'
GROUP BY user.user_id
HAVING count(user.user_id) >= 2;`

5. Find out the course name in descending order which are taken by the user id id 2017001.

Ans : `SELECT distinct course.course_name
FROM user INNER JOIN takes
ON user.user_id = takes.takes_id
INNER JOIN course ON takes.course_id = course.course_id
WHERE user.user_id = '2017001'
ORDER BY course.course_name DESC;`

6. Find out the name of the users who take the course of Ahsan.

```
Ans : SELECT distinct user.username  
FROM tutor INNER JOIN teaches  
ON tutor.tutor_id = teaches.teaches_id  
INNER JOIN takes ON takes.course_id = teaches.course_id  
INNER JOIN user ON user.user_id = takes.takes_id  
WHERE tutor.tutor_name='Ahsan';
```

7. How many courses does user id 2017001 have secured grade more than 3.0 ?

```
Ans : SELECT count(*)  
FROM takes  
WHERE takes_id = '2017001'  
AND grade > 3.0;
```

8. Find out the name of the top 5 users who secure more than 3.2 in maximum number of courses.

```
Ans : SELECT user.username  
FROM user INNER JOIN takes  
ON user.user_id = takes.takes_id  
WHERE takes.grade > 3.2  
GROUP BY user.username  
ORDER BY DESC  
LIMIT 5;
```

9. Show the total number of crousehour in descending order for each department.

```
Ans : SELECT course_dept, sum(course_hour) as total_credit FROM course  
GROUP BY course_dept ORDER BY course_dept DESC;
```

10 Find out the total number of courses offered in each department

Ans : `SELECT course_dept, count(*) FROM course GROUP BY course_dept;`

Hardware and Software Requirements

Hardware requirement

- OS : Windows 10
- Hard Drive : 1 TB
- Ram : 8 GB

Software requirement

- Java Language
- Net Beans IDE 8.0.2
- MS SQL Server 2005
- Xampp

Limitation

The project is worked properly but it is not perfectly designed for a user or a tutor so that a user or a tutor can use it

Future work

At first, we want to remove our limitation so that every user can use it properly. Then we will update it time to time what should be needed according to user.

Conclusion

Every work should have a perfect why so that a person can develop not only himself but also for a region may be the region is big. That is why we want to develop our country by developing this idea.