



# [GROUP 32]

[Phase 3]

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# CS 4400 Project Phase III Query

Group Number 32

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Note: Anything %s is going to be replaced by whatever variable the user inputs. The actual variable names are referring to the tables are not in quotes.

### **General Login for Two Types of Users**

```
SELECT UserType FROM User WHERE Username = %s AND Password = %s
```

### **Query for Student Users**

#### **1. New user registration**

-Check if the email and username are unique

```
SELECT Email FROM User WHERE Email = %s
```

```
SELECT Username FROM User WHERE Username = %s
```

-Insert new user information

```
INSERT INTO User (Username, Password, Email, UserType)
VALUES (%s, %s, %s, %s)
```

```
INSERT INTO Student (Username, Major, Year)
VALUES (%s, %s, %s)
```

#### **2. Get all projects names**

```
SELECT Project.ProjName, Project.DesignationName,
       Project_Major_Require.Major, Project_Year_Require.Year,
       Project_Dept_Require.Dept, Project_is_category.Category_name
FROM `Project`
LEFT JOIN Project_Major_Require
      ON Project.ProjName = Project_Major_Require.Pname
LEFT JOIN Project_Year_Require
      ON Project.ProjName = Project_Year_Require.Pname
LEFT JOIN Project_Dept_Require
      ON Project.ProjName = Project_Dept_Require.Pname
LEFT JOIN Project_is_category
      ON Project.ProjName = Project_is_category.Project_name
LIMIT 0 , 30000000000
```

#### **3. Get all courses**

```
SELECT Course.Name, Course.Designation_name,
       Course_is_category.Category_name
FROM Course
LEFT JOIN Course_is_category
      ON Course.Name = Course_is_category.Course_name
LIMIT 0 , 30000000000
```

- 4. Get all applications of the user that's currently logged in, include application date, project name and status from database**

```
SELECT Project_name,Date,Status
FROM Apply
Where Student_name= %s
LIMIT 0 , 30000000000
```

- 5. Update profile by changing major**

```
UPDATE cs4400_Team_32.Student SET Major = %s
WHERE Student.Username = %s
```

- 6. Update profile by changing year**

```
UPDATE cs4400_Team_32.Student SET Year = %s
WHERE Student.Username = %s
```

- 7. View project details which include advisor, description, designation, category, requirements, and estimated No. of students**

```
SELECT Project.AdvisorName,Project.AdvisorEmail,
       Project.Description,Project.DesignationName,
       Project_is_category.Category_name,
       Project_Major_Require.Major, Project_Year_Require.Year,
       Project_Dept_Require.Dept,Project.EstNoStudent
FROM Course
LEFT JOIN Course_is_category
      ON Course.Name = Course_is_category.Course_name
WHERE Course.Name= %s
LIMIT 0 , 30000000000
```

- 8. Students apply for a project as insert a new tuple (username, project\_name)**

```
INSERT INTO Apply (Project_name,Student_name, Date,Status)
VALUES (%s, %s, %s, %s)
```

**9. Check if the application rejected by major, year and department**

```
SELECT Major FROM Project_Major_Require WHERE Pname=%s
SELECT Major FROM Student WHERE Username=%s
SELECT Year FROM Project_Year_Require WHERE Pname=%s
SELECT Year FROM Student WHERE Username=%s
SELECT Dept FROM Project_Dept_Require WHERE Pname=%s
SELECT Major.Dept_name
FROM Student
NATURAL JOIN Major WHERE Username = %s AND
Major.name = Student.Major
```

**10. View course details**

```
SELECT Course.Course_number, Course.Instructor,
       Course.Designation_name, Course_is_category.Category_name,
       Course.EstNoStudents
FROM Course
LEFT JOIN Course_is_category
ON Course.Name = Course_is_category.Course_name
WHERE Course.Name= %s
LIMIT 0 , 300000000000
```

## Query for Administration Users

### 1. Add a new project

```
INSERT INTO Project (ProjName, Description, AdvisorEmail,  
                    AdvisorName, EstNoStudent, DesignationName)  
VALUES (%s, %s, %s, %s, %s, %s)  
INSERT INTO Project_is_category VALUES (%s, %s)  
INSERT INTO Project_Year_Require (Pname, Year) VALUES (%s, %s)  
INSERT INTO Project_Major_Require (Pname, Major) VALUES (%s, %s)  
INSERT INTO Project_Dept_Require (Pname, Dept) VALUES (%s, %s)
```

### 2. Add a new course

```
INSERT INTO Course (Name, Course_number, Instructor, EstNoStudents,  
                  Designation_name)  
VALUES (%s, %s, %s, %s, %s)  
INSERT INTO Course_is_category (Course_name, Category_name)  
VALUES (%s, %s)
```

### 3. Approve application

```
UPDATE Apply SET Status = %s  
WHERE Project_name = %s AND Student_name = %s
```

### 4. Reject application

```
UPDATE Apply SET Status = %s  
WHERE Project_name = %s AND Student_name = %s
```

### 5. Get all majors

```
SELECT Name FROM Major
```

### 6. Get student information by username

```
SELECT * FROM User WHERE Username = %s  
SELECT Major, Year FROM Student WHERE Username = %s
```

### 7. Get top projects

```
SELECT Project_name FROM Apply
```

### 8. Find department by major name

```
SELECT Dept_name FROM Major WHERE Name = %s
```

**9. Get application information**

```
SELECT Apply.Project_name, Apply.Status, Student.Major, Student.Year
FROM   Apply INNER JOIN Student
      ON Apply.Student_name = Student.Username
```

**10. Get all department**

```
SELECT Dept_name FROM Major
```

**11. Report number of applications**

```
SELECT COUNT(Project_name)
FROM Apply GROUP BY Project_name HAVING Project_name=%s
```

**12. Report accept rate**

```
SELECT COUNT( Project_name )
FROM Apply
WHERE STATUS = %s
GROUP BY Project_name HAVING Project_name = %s
```

**13. Report top majors**

```
SELECT Student.Major
FROM Apply, Student
WHERE Apply.Student_name = Student.Username AND
      Apply.Project_name = %s
GROUP BY Student.Major
ORDER BY COUNT( Student.Major ) DESC
LIMIT 0 , 3
```

**14. Application Report**

```
SELECT Project_name
FROM Apply
GROUP BY Project_name
```