

**Term Project Report**  
**COP 4710**  
Application: College Event Website (CEW)

- **Title:** Group Report
- **Project Name:** College Event Website
- **Course information:** COP4710 – 0001 Spring 2022
  - **Course Number:** COP4710
  - **Course Section:** 0001
  - **Term:** Spring 2022
- **Table of Contents:**

## Table of Contents

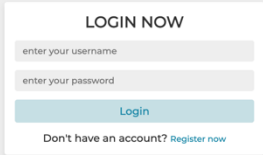
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## Project Description

- A college events website where multiple universities and registered student organizations (RSO) can post events for the public and students at the universities and respective organizations to see.

## GUI

This project uses a LAMP stack, entailing, Linux, Apache, MySQL for the database system, and PHP, with HTML and CSS for the frontend.



The image shows a login form centered on a light gray background. The form is titled "LOGIN NOW" in bold. It contains two input fields: "enter your username" and "enter your password". Below these fields is a blue "Login" button. At the bottom of the form, there is a link that says "Don't have an account? [Register now](#)".

Figure 1 Login

**REGISTER NOW**

enter your username

enter your first name

enter your last name

enter your email

enter your phone number

enter your password

confirm your password

enter your university name

student

Register Now

already have an account? [login now](#)

Figure 2 Registration

**RSO Name**  
Enter your RSO Name

**Admin username**  
Enter your admin's username

**Member username**  
Enter your member's username

**Member username**  
Enter your member's username

**Member username**  
Enter your member's username

**Member username**  
Enter your member's username

**RSO Description**  
Describe your RSO

Submit

Figure 3 Create RSO

RSO Name

Enter the name of your RSO

Event Date and Time

mm/dd/yyyy, --:-- --

Location

Address

Contact Email

Include an email

Event Name

Enter the name of your event

End Date and Time

mm/dd/yyyy, --:-- --

University Name

University name

Description

Describe your event

Submit

Figure 4 Create RSO Event

Event Name

Enter the name of your event

End Date and Time

mm/dd/yyyy, --:-- --

University Name

University name

Description

Describe your event

Event Date and Time

mm/dd/yyyy, --:-- --

Location

Address

Contact Email

Include an email

Submit

Figure 5 Create Private Events

Event Name

Enter the name of your event

Event Date and Time

mm/dd/yyyy, --:-- --

End Date and Time

mm/dd/yyyy, --:-- --

Location

Address

University Name

University name

Contact Email

Include an email

Description

Describe your event

Submit

Figure 6 Create Public Events

Name: General Body Meeting

Description: The Association for Computing Machinery for Women will host its second General Body Meeting to discuss plans for the semester, membership, mentorship, and more! Come join us and we can't wait to see you there.

Date: 2022-04-18

Contact Email: anotherstudent@gmail.com

Username

Enter your Username

Rating

Enter your rating (0-5)

Comment

Enter your Comment

Post Comment


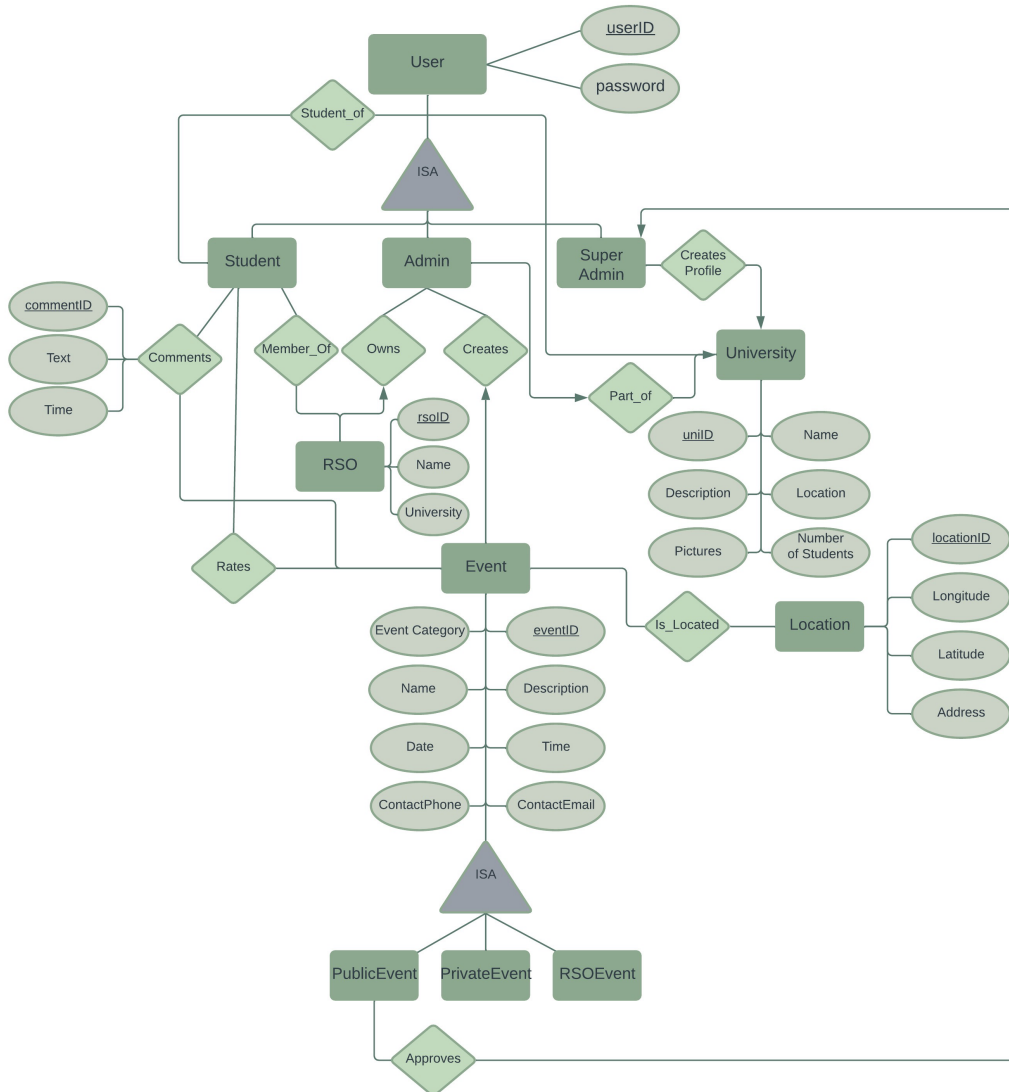


Figure 7 View Event

## ER Diagram



## Constraints

The constraints are highlighted below, and include NOT NULL for when things cannot be left empty, primary and foreign keys to model relationships, defaults, and occasionally checks, to ensure that the right data is entered into the database.

```
CREATE TABLE universities(  
    name VARCHAR(100) PRIMARY KEY,  
    location VARCHAR(10000),  
    uni_description VARCHAR(10000),  
    no_of_students INT,  
    image_url VARCHAR(255)  
);
```

```
CREATE TABLE contacts(  
    email VARCHAR(100) PRIMARY KEY,  
    CHECK(email LIKE '%_@_%._%'),  
    f_name VARCHAR(50),  
    l_name VARCHAR(50),  
    phone_no VARCHAR(50) NOT NULL  
);
```

```
CREATE TABLE users(  
    username VARCHAR(100) PRIMARY KEY,  
    first_name VARCHAR(50),  
    last_name VARCHAR (50),  
    password VARCHAR(255) NOT NULL,  
    role_type VARCHAR(100) NOT NULL,  
    email VARCHAR(100) NOT NULL,  
    university VARCHAR(100) NOT NULL,  
    FOREIGN KEY (email) REFERENCES contacts(email),  
    FOREIGN KEY (university) REFERENCES universities(name)  
);
```

```
CREATE TABLE rsos(  
    id INT AUTO_INCREMENT PRIMARY KEY,  
    name VARCHAR(100) NOT NULL,  
    rso_description VARCHAR(10000),  
    admin_username VARCHAR(100) NOT NULL,  
    university VARCHAR(100) NOT NULL,  
    FOREIGN KEY (admin_username) REFERENCES users(username),  
    FOREIGN KEY (university) REFERENCES universities(name)  
);
```

```
CREATE TABLE rso_members(  
    rso INT NOT NULL,
```

```
rso_member VARCHAR(100) NOT NULL,  
FOREIGN KEY (rso) REFERENCES rsos(id),  
FOREIGN KEY (rso_member) REFERENCES users(username),  
PRIMARY KEY (rso, rso_member)
```

);

CREATE TABLE events(  
id INT AUTO\_INCREMENT PRIMARY KEY,

```
event_name VARCHAR(500) NOT NULL,  
event_description VARCHAR(10000),  
event_category VARCHAR(255),  
start_time DATETIME NOT NULL,  
end_time DATETIME NOT NULL,  
privacy_level ENUM('public', 'private', 'rso event') DEFAULT 'public',  
location VARCHAR(10000),  
super_admin_approved BIT DEFAULT 1 NOT NULL,  
created_at TIMESTAMP DEFAULT NOW(),  
contact VARCHAR(100) NOT NULL,  
university VARCHAR(100) NOT NULL,  
rso INT,  
FOREIGN KEY (contact) REFERENCES contacts(email),  
FOREIGN KEY (rso) REFERENCES rsos(id),  
FOREIGN KEY (university) REFERENCES universities (name)
```

);

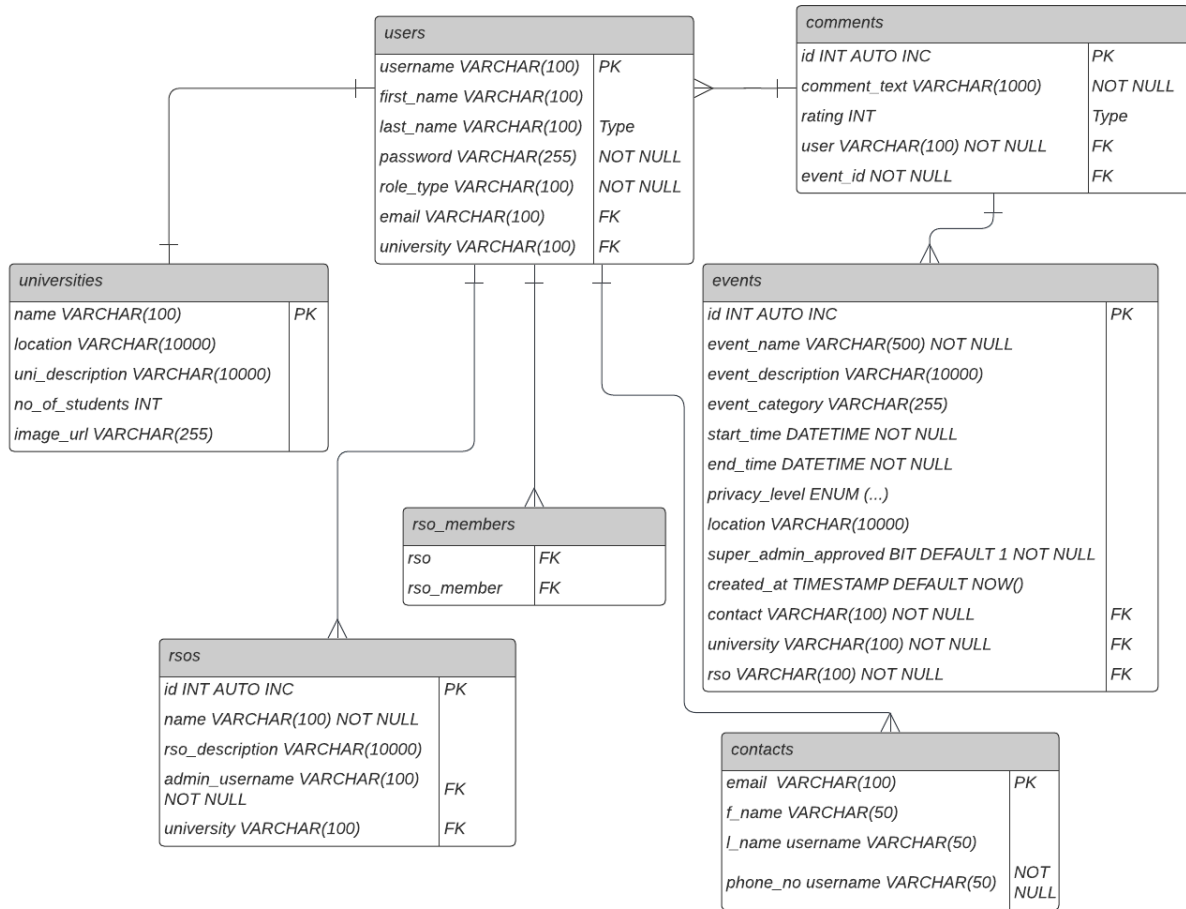
CREATE TABLE comments(  
id INT AUTO\_INCREMENT PRIMARY KEY,

```
comment_text VARCHAR(1000) NOT NULL,  
rating INT,  
CONSTRAINT CHK_rating CHECK(  
rating <= 5 AND rating >= 0  
),  
user VARCHAR(100) NOT NULL,  
event_id INT NOT NULL,  
FOREIGN KEY (user) REFERENCES users(username),  
FOREIGN KEY (event_id) REFERENCES events(id)
```

);



## Relational Data Model



## Populating Tables

INSERT INTO

universities

VALUES

(

'University of Central Florida',

28.603568174040756,

-81.20021994046058,

'The University of Central Florida (UCF) is a metropolitan research university built to make a better future for our students and society.',

70406,

'https://www.ucf.edu/news/files/2021/09/ucf-2022-rankings.jpg'

),

(

'University of Florida',

29.64509812399473,

-82.3550177679679,

'The University of Florida is a public land-grant research university located in Gainesville, Florida. It is a senior member of the State University System of Florida and traces its origins back to 1853.',

61112,

'https://storage.googleapis.com/collegetuitioncompare/images/webp/colleges/134130-university-of-florida.webp'

);

INSERT INTO

contacts

VALUES

(

'manahil@gmail.com',

'Manahil',

'Awan',

'407-555-5555'

),

(

'anotherstudent@gmail.com',

'Another',

'Student',

'312-123-4567'

),

(

'janedoe@gmail.com',

'Jane',

'Doe',

'407-135-7979'

```
);
```

```
INSERT INTO
```

```
users(username, password, role_type, email, university)
```

```
VALUES
```

```
(  
  'manahil',  
  'Manahil',  
  'Awan',  
  'password',  
  'super admin',  
  'manahil@gmail.com',  
  'University of Central Florida'
```

```
),
```

```
(  
  'anotherstudent',  
  'Another',  
  'Student',  
  'password',  
  'admin',  
  'anotherstudent@gmail.com',  
  'University of Central Florida'
```

```
),
```

```
(  
  'janedoe',  
  'Jane',  
  'Doe',  
  'password',  
  'student',  
  'janedoe@gmail.com',  
  'University of Florida'
```

```
);
```

```
INSERT INTO
```

```
rsos(  
  name,  
  rso_description,  
  admin_username,  
  university
```

```
)
```

```
VALUES
```

```
(  
  'Association for Computing Machinery - Women',  
  'The mission of the Association for Computing Machinery–Women is to promote diversity in  
tech by empowering women in computing. We are a coed club that is welcoming to everyone
```

who supports our mission. We focus on creating interactive content and building a supportive community.',

```
'anotherstudent',  
'University of Central Florida'  
);
```

```
INSERT INTO  
  rso_members  
VALUES  
  (1, 'janedoe');
```

```
INSERT INTO  
  events(  
    event_name,  
    event_description,  
    event_category,  
    start_time,  
    end_time,  
    privacy_level,  
    latitude,  
    longitude,  
    contact,  
    university,  
    rso
```

```
)  
VALUES
```

```
(  
  'General Body Meeting',  
  'The Association for Computing Machinery for Women will host its first General Body Meeting to discuss plans for the semester, membership, mentorship, and more! Come join us and we can't wait to see you there.',
```

```
  'General Meeting',  
  '2022-04-18 13:00:00.000',  
  '2022-04-18 14:00:00.000',  
  'rso event',  
  28.603568174040756,  
  -81.20021994046058,  
  'anotherstudent@gmail.com',  
  'University of Central Florida',  
  1
```

```
);
```

```
INSERT INTO  
  comments(comment_text, user, event_id)
```

```
VALUES  
(
```

"I am so excited! I look forward to becoming a mentee and meeting new people!",  
'janedoe',  
1  
);

## SQL Examples

- Insert a new RSO

```
if($domain != $domain_member_one || $domain != $domain_member_two || $domain != $domain_member_three || $domain != $domain_member_four)
{
    echo "<script>alert('One of the members is not from the same university, or does not have the same email domain.')</script>";
}
else{

    // insert rso name, rso desc, admin username, university into rsos
    $sql = mysqli_query($conn, "INSERT INTO rsos (name, rso_description, admin_username, university) VALUES ('$name', '$rso_description', '$admin_username', '". $row['university']. "')");

    // after inserting, get rsos id to insert rso members
    $stmt_five = "SELECT id FROM rsos WHERE name = '$name'";
    $result_stmt = mysqli_query($conn, $stmt_five);
    $row_five = $result_stmt->fetch_assoc();

    // add other members to rso_members
    $insert = mysqli_query($conn, "INSERT INTO rso_members (rso, rso_member) VALUES ('.$row_five['id'].', '$admin_username')");
    $insert_one = mysqli_query($conn, "INSERT INTO rso_members (rso, rso_member) VALUES ('.$row_five['id'].', '$rso_member_one')");
    $insert_two = mysqli_query($conn, "INSERT INTO rso_members (rso, rso_member) VALUES ('.$row_five['id'].', '$rso_member_two')");
    $insert_three = mysqli_query($conn, "INSERT INTO rso_members (rso, rso_member) VALUES ('.$row_five['id'].', '$rso_member_three')");
    $insert_four = mysqli_query($conn, "INSERT INTO rso_members (rso, rso_member) VALUES ('.$row_five['id'].', '$rso_member_four')");

    // change user username from student to admin
    $statement = "UPDATE users SET role_type='admin' WHERE username='$admin_username'";
    $stmtresult = mysqli_query($conn, $statement);
    if ($stmtresult) {
        echo "<script>alert('New RSO successfully created.')</script>";
    }
    else {
        echo "<script>alert('Failed to add new RSO. Please try again later.')</script>";
    }
}
```

- Insert a new student

```
// insert id and username into rso_members
$id = $row['id'];
$sql = "INSERT INTO rso_members (rso, rso_member)
VALUES ('$id', '$rso_member')";

$result = mysqli_query($conn, $sql);
if ($result) {
    echo "<script>alert('Joined RSO successfully.')</script>";
    header('location:student_page.php');
}
else {
    echo "<script>alert('Could not join RSO at this time. Please try again later.')</script>";
}
}
```

- insert a new event

```
// insert into events event_name, start time, end time, location, contact, privacy level, event description, id
$sql = "INSERT INTO events (event_name, start_time, end_time, university, location, contact, privacy_level, event_description) VALUES ('$event_name', '$start_time', '$end_time', '$university', '$location', '$contact', '$privacy', '$event_description')";

if ($conn->query($sql) === TRUE) {
    echo "New event added successfully";
}
else {
    echo "Error: " . $sql . "<br>" . $conn->error;
}

// insert into events event_name, start time, end time, location, contact, privacy level, event description, id
$sql = "INSERT INTO events (event_name, start_time, end_time, university, location, contact, privacy_level, event_description, super_admin_approved) VALUES ('$event_name', '$start_time', '$end_time', '$university', '$location', '$contact', '$public', '$event_description', FALSE)";

if ($conn->query($sql) === TRUE) {
    echo "New event added successfully";
}
else {
    echo "Error: " . $sql . "<br>" . $conn->error;
}

// insert into events event_name, start time, end time, location, contact, privacy level, event description, id
$sql = "INSERT INTO events (event_name, start_time, end_time, university, location, contact, privacy_level, event_description, rso) VALUES ('$event_name', '$start_time', '$end_time', '$university', '$location', '$contact', '$rso event', '$event_description', '$row[id]')";
//echo $sql;
//die();
if ($conn->query($sql) === TRUE) {
    echo "New event added successfully";
}
else {
    echo "Error: " . $sql . "<br>" . $conn->error;
}
}
```

- insert/update a new comment

```

if (isset($_POST['submit'])) { // Check press or not Post Comment Button
    $user = $_POST['user']; // Get user from form
    $rating = $_POST['rating']; // Get rating from form
    $comment_text = $_POST['comment_text']; // Get Comment from form

    $id = $_GET['id'];
    $sql = "INSERT INTO comments (comment_text, rating, user, event_id)
        VALUES ('$comment_text', '$rating', '$user', $id)";
    $result = mysqli_query($conn, $sql);
    if ($result) {
        echo "<script>alert('Comment added successfully.')</script>";
    } else {
        echo "<script>alert('Comment does not add.')</script>";
    }
}

```

```

if (isset($_POST['submit'])) { // Check press or not Post Comment Button
    $id = $_POST['id'];
    $user = $_POST['user']; // Get user from form
    $rating = $_POST['rating']; // Get rating from form
    $comment_text = $_POST['comment_text']; // Get Comment from form

    // $id = $_GET['id'];
    $sql = "UPDATE comments SET comment_text='$comment_text', rating='$rating' WHERE id='$id'";
    $result = mysqli_query($conn, $sql);
    if ($result) {
        echo "<script>alert('Comment updated successfully.')</script>";
    } else {
        echo "<script>alert('Comment failed to update. Please try again later.')</script>";
    }
}

```

```

if (isset($_POST['delete'])) { // Check press or not Post Comment Button
    $id = $_POST['id'];

    // $id = $_GET['id'];
    $sql = "DELETE FROM comments WHERE id = '$id'";
    $result = mysqli_query($conn, $sql);
    if ($result) {
        echo "<script>alert('Comment updated successfully.')</script>";
    } else {
        echo "<script>alert('Comment failed to update. Please try again later.')</script>";
    }
}

```

- display events

```

function listPublicEvents() {
    @include 'config.php';
    $result = mysqli_query($conn, " SELECT event_name, DATE(start_time) AS start_date, TIME(start_time) AS time_start, DATE(end_time) AS end_date, TIME(end_time) AS time_end, university, id FROM events WHERE privacy_level = 'public' AND super_admin_approved = TRUE");
}

function listRsoEvents() {
    @include 'config.php';
    $username = $_GET['username'];

    // get rso id
    $statid = mysqli_query($conn, "SELECT rso from rso_members WHERE rso_member = '$username'");
    $queryid = $statid->fetch_assoc();
    $rsoid = $queryid['rso'];

    // get event details using rso id
    $result = mysqli_query($conn, " SELECT event_name, DATE(start_time) AS start_date, TIME(start_time) AS time_start, DATE(end_time) AS end_date, TIME(end_time) AS time_end, university, id, rso FROM events WHERE privacy_level = 'rso event' AND rso = '$rsoid'");
}

function listPrivateEvents() {
    @include 'config.php';
    $result = mysqli_query($conn, " SELECT event_name, DATE(start_time) AS start_date, TIME(start_time) AS time_start, DATE(end_time) AS end_date, TIME(end_time) AS time_end, university, id FROM events WHERE privacy_level = 'private'");
}

```

## Constraint Enforcement

- Admin who is not admin of RSO attempts to create an event for that RSO

localhost:3000/host\_rso\_events.php?username=admin2

RSO Name  
Software Engineering Club

Event Name  
Test

Event Date and Time  
04/28/2022, 07:05 AM

End Date and Time  
04/28/2022, 08:05 AM

Location  
4000 Central Florida Blvd, Orla

University Name  
University of Central Florida

Contact Email  
admin@knights.ucf.edu

Description  
Test

Submit

Figure 8 Attempting to create an RSO for SWE club, when admin is ppan

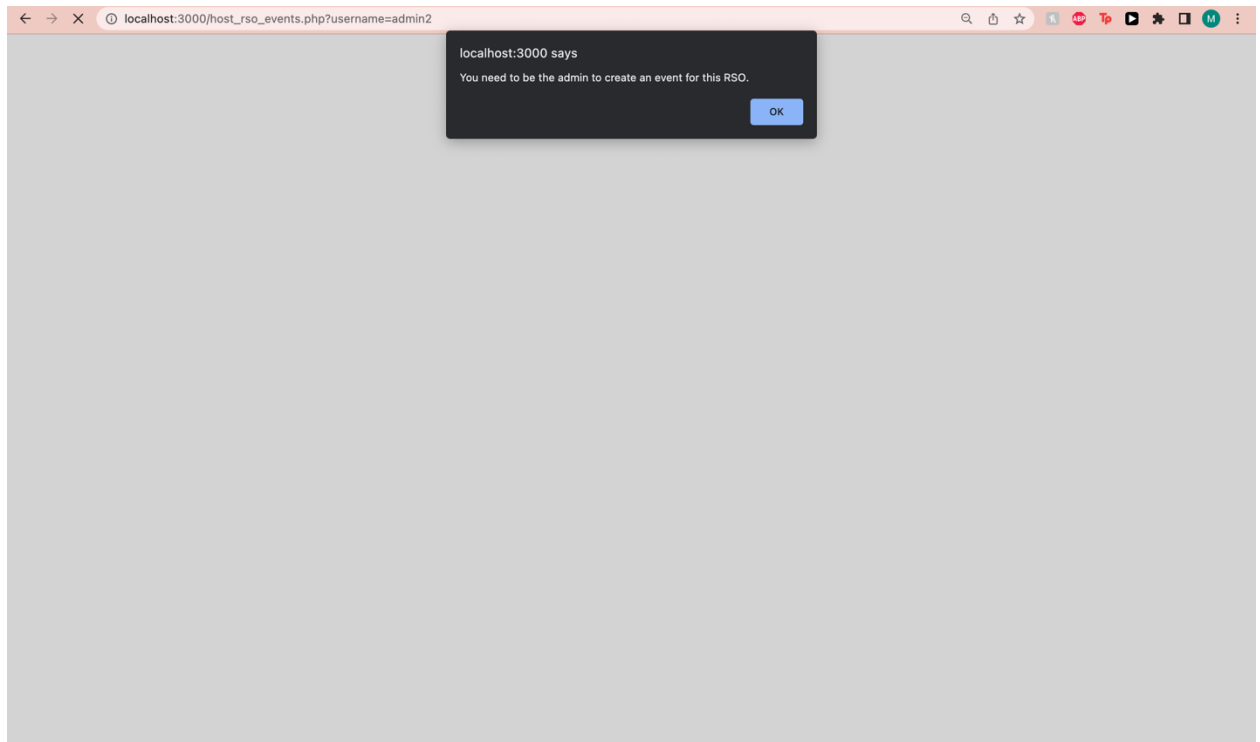


Figure 9 Error when trying to add an event when not signed in as correct admin.



- Insert of an RSO with 4 members

The image shows two screenshots of a web browser interface. The top screenshot displays a form titled "join\_new\_rso.php" with the following fields:

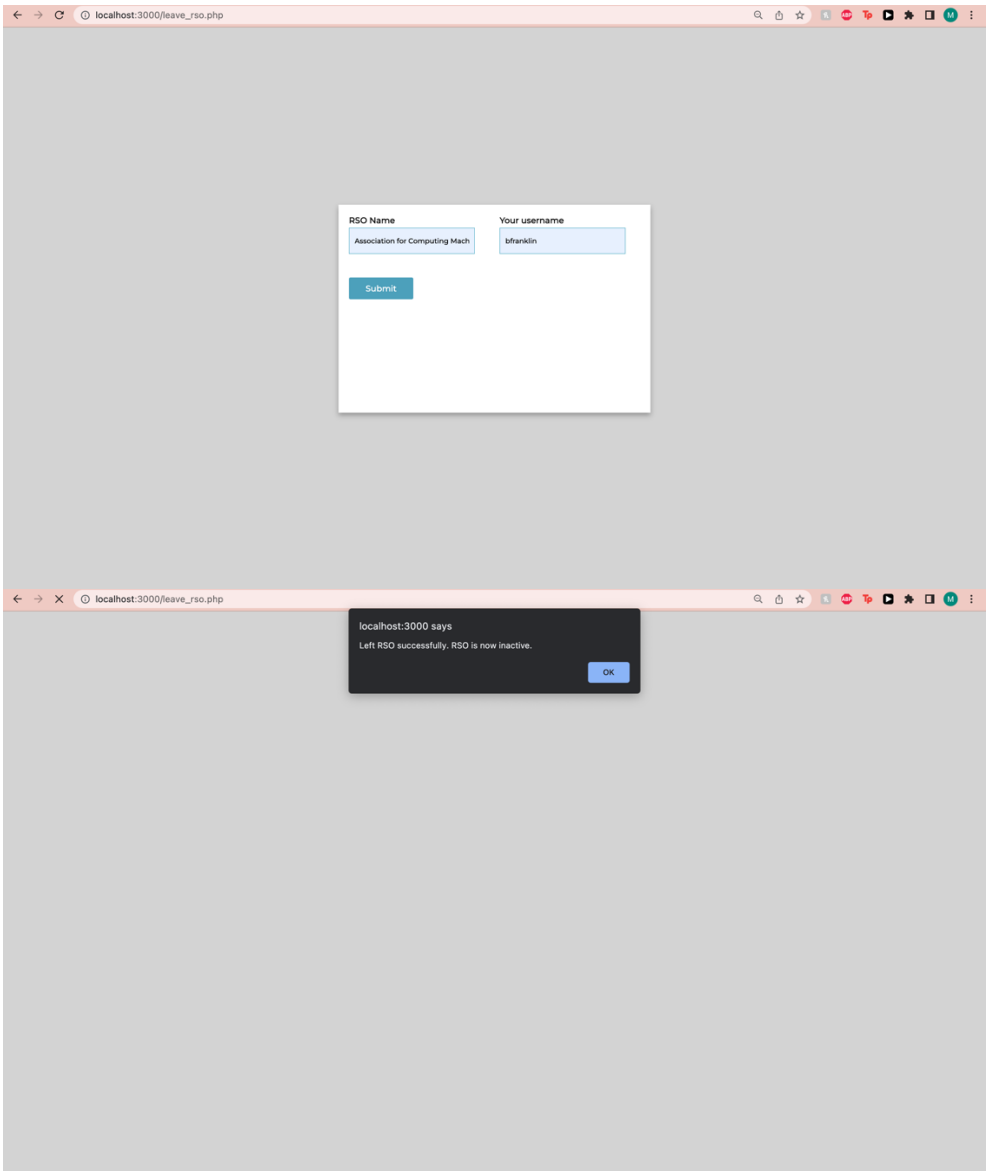
RSO Name	Your username
Association for Computing Mach	ibfranklin

Below the fields is a "Submit" button. The bottom screenshot shows a dark notification box with the text:

localhost:3000 says  
Joined RSO successfully. RSO Active.

An "OK" button is located at the bottom right of the notification box.

- Deletion of member of RSO with 5 members



## Advanced Features

### Password hashing

- All passwords in database are the same for the sake of testing simplicity, however they are all hashed using md5 hashing

```
mysql> SELECT * FROM users;
```

username	password
admin	5f4dcc3b5aa765d61d8327deb882cf99
admin2	5f4dcc3b5aa765d61d8327deb882cf99

```
$password = md5($_POST['password']);  
$cpassword = md5($_POST['cpassword']);
```

## Conclusions

As I was working on this project, there were many more additions I wanted make to the code to make it more thorough and robust. I would have added more validations and alerts on all the forms and tried to make it easier for anyone to understand how to use the website, even if it was their first time doing so. I would also like to have added social media integration, allowing users to post about the events on their social media. Unfortunately, it took me a long time to grasp how to make this website, and every little implementation took me quite a while because I do not have an extensive understanding of any of the technologies. Additionally, due to strong weather I also lost Wi-Fi for a long time (shown below), and this slowed my efforts even more.

