

Group Report
"College Event Website"
COP4710-0001 SPRING 2025
Group #89
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Project Description

The College Event Website is designed to address the challenges and inefficiencies in how university events are currently managed and accessed. Most universities maintain an events calendar that lists only officially recognized events, often omitting student-organized activities and RSO events. There is also no unified method for students to track or interact with events relevant to their interests or affiliations in real time.

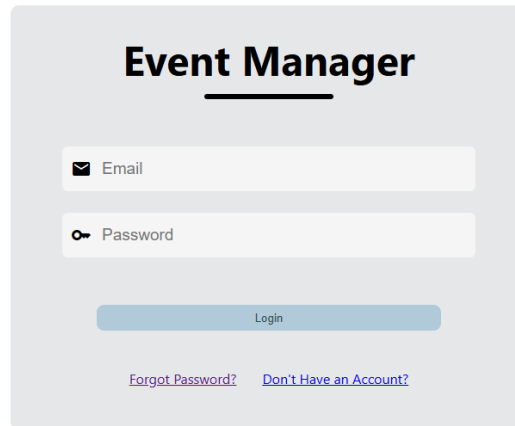
Our web-based application offers a centralized, interactive platform where students, RSOs, and university administrators can create, manage, and engage with campus events. The system supports three user levels:

- Super Admins can create and manage university profiles.
- Admins are affiliated with RSOs and can host events.
- Students can view and interact with events relevant to their university or RSOs.

The project was developed using Javascript and SQL.

GUI

Log In



The login form is titled "Event Manager" with a horizontal line underneath. It contains two input fields: "Email" with an envelope icon and "Password" with a key icon. Below these is a blue "Login" button. At the bottom, there are two links: "Forgot Password?" and "Don't Have an Account?".

Event Manager

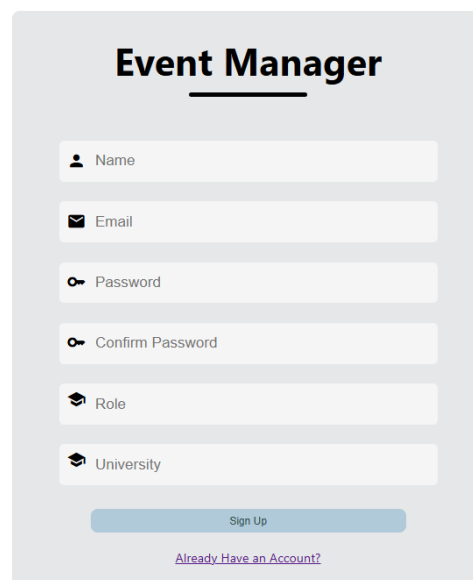
Email

Password

Login

[Forgot Password?](#) [Don't Have an Account?](#)

Sign Up



The sign up form is titled "Event Manager" with a horizontal line underneath. It contains six input fields: "Name" with a person icon, "Email" with an envelope icon, "Password" with a key icon, "Confirm Password" with a key icon, "Role" with a graduation cap icon, and "University" with a graduation cap icon. Below these is a blue "Sign Up" button. At the bottom, there is a link: "Already Have an Account?".

Event Manager

Name

Email

Password

Confirm Password

Role

University

Sign Up

[Already Have an Account?](#)

View Events Page

Student Events Dashboard

L

Live Demo
University of Central Florida

Login

Upcoming EventsPast EventsMy RSOs

Filter by Type: All Types

Hackathon 2025

Sun, Jun 15, 12:00 AM

UCF Main Campus

Public Tech Talk

☆☆☆☆ 4 (Not rated)

Comments (1)

taylor.finch 4/8/2025, 10:04:45 PM
Nice work!!!

Add a comment...

Post

Share to FacebookShare to Twitter

AI Workshop

Thu, Apr 10, 12:00 AM

UCF Main Campus

Public Tech Talk

☆☆☆☆ 0 (Not rated)

Comments (0)

Add a comment...

Post

Share to FacebookShare to Twitter

Python Workshop

Tue, Apr 15, 09:00 PM

UCF Main Campus

Public Tech Talk

☆☆☆☆ 5 (Not rated)

Comments (1)

testuser 4/10/2025, 12:29:39 AM
Thanks

Add a comment...

Post

Share to FacebookShare to Twitter

Knight Bakeoff

Fri, Apr 18, 05:48 PM

UCF Main Campus

Public Tech Talk

☆☆☆☆ 0 (Not rated)

Comments (0)

Add a comment...

Post

Share to FacebookShare to Twitter

Join RSO

localhost:3000

localhost:3000 says
You have successfully joined UCF Hackers.

OK

Student Events Dashboard

L

Live Demo
University of Central Florida

Login

Upcoming EventsPast EventsMy RSOs

No RSOs found
You're not part of any RSOs yet.

Available RSOs

UCF Hackers

Join RSO

UCF Chefs

Join RSO

UCF Robotics Club

Join RSO

View/Create Comment(s)

Student Events Dashboard

Live Demo
University of Central Florida
Logout

Upcoming Events Past Events My RSOs

Filter by Type: All Types

Hackathon 2025
Sun, Jun 15, 12:00 AM

UCF Main Campus
Public Tech Talk

☆☆☆☆ 4 (Not rated)

Comments (2)

taylor.finch 4/9/2025, 10:04:45 PM
Nice work!!!!

livedemo 4/10/2025, 2:49:49 AM Edit Delete
Awesome!

Add a comment... Post

Share to Facebook Share to Twitter

AI Workshop
Thu, Apr 10, 12:00 AM

UCF Main Campus
Public Tech Talk

☆☆☆☆ 0 (Not rated)

Comments (0)

Add a comment... Post

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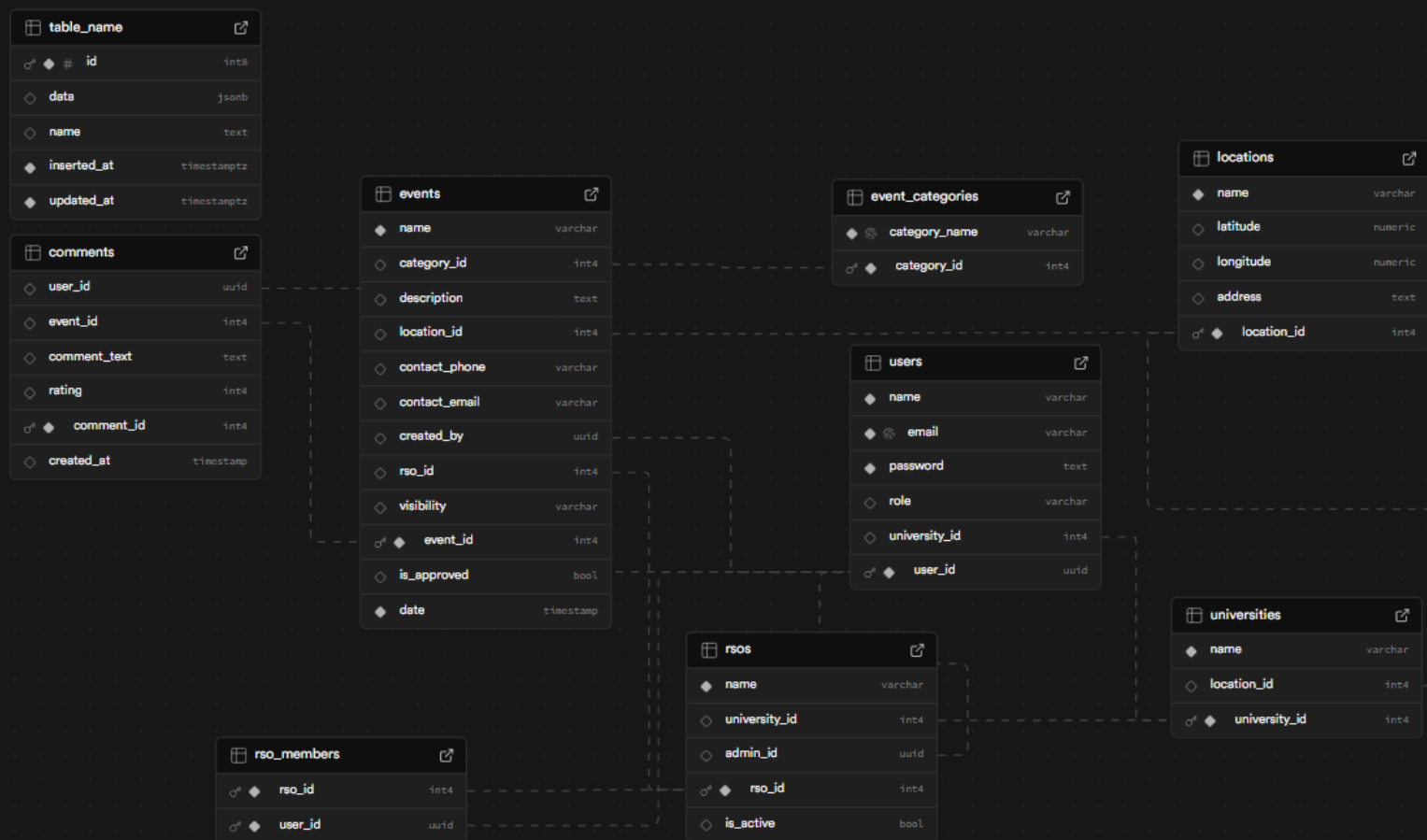
UCF Main Campus
Public Tech Talk

☆☆☆☆ 0 (Not rated)

Comments (0)

Add a comment... Post

ER-Model



Relational Data Model Script

-- Locations Table

```
CREATE TABLE locations (  
    location_id SERIAL PRIMARY KEY,  
    name VARCHAR(255) NOT NULL,  
    latitude DECIMAL(9,6),  
    longitude DECIMAL(9,6),  
    address TEXT  
);
```

-- Universities Table

```
CREATE TABLE universities (  
    university_id SERIAL PRIMARY KEY,  
    name VARCHAR(255) NOT NULL,  
    location_id INT REFERENCES locations(location_id) ON DELETE SET NULL  
);
```

-- Users Table

```
CREATE TABLE users (  
    user_id UUID DEFAULT gen_random_uuid() PRIMARY KEY,  
    name VARCHAR(255) NOT NULL,  
    email VARCHAR(255) UNIQUE NOT NULL,  
    password TEXT NOT NULL,  
    role VARCHAR(50) CHECK (role IN ('student', 'admin', 'super_admin')),
```

```
    university_id INT REFERENCES universities(university_id) ON DELETE SET NULL  
);
```

-- RSOs Table

```
CREATE TABLE rsos (  
    rso_id SERIAL PRIMARY KEY,  
    name VARCHAR(255) NOT NULL,  
    university_id INT REFERENCES universities(university_id) ON DELETE CASCADE,  
    admin_id UUID REFERENCES users(user_id) ON DELETE CASCADE,  
    is_active BOOLEAN DEFAULT FALSE  
);
```

-- RSO Members Table (Many-to-Many Users <-> RSOs)

```
CREATE TABLE rso_members (  
    rso_id INT REFERENCES rsos(rso_id) ON DELETE CASCADE,  
    user_id UUID REFERENCES users(user_id) ON DELETE CASCADE,  
    PRIMARY KEY (rso_id, user_id)  
);
```

-- Event Categories Table

```
CREATE TABLE event_categories (  
    category_id SERIAL PRIMARY KEY,  
    category_name VARCHAR(100) UNIQUE NOT NULL  
);
```

-- Events Table


```

CREATE TABLE events (
    event_id SERIAL PRIMARY KEY,
    name VARCHAR(255) NOT NULL,
    category_id INT REFERENCES event_categories(category_id) ON DELETE CASCADE,
    description TEXT,
    date DATE NOT NULL,
    time TIME NOT NULL,
    location_id INT REFERENCES locations(location_id) ON DELETE SET NULL,
    contact_phone VARCHAR(20),
    contact_email VARCHAR(255),
    created_by UUID REFERENCES users(user_id) ON DELETE CASCADE,
    rso_id INT REFERENCES rsos(rso_id) ON DELETE SET NULL,
    visibility VARCHAR(50) CHECK (visibility IN ('public', 'private', 'rso')),
    is_approved BOOLEAN DEFAULT FALSE
);

```

-- Comments & Ratings Table

```

CREATE TABLE comments (
    comment_id SERIAL PRIMARY KEY,
    user_id UUID REFERENCES users(user_id) ON DELETE CASCADE,
    event_id INT REFERENCES events(event_id) ON DELETE CASCADE,
    comment_text TEXT,
    rating INT CHECK (rating BETWEEN 1 AND 5),
    created_at TIMESTAMP DEFAULT now()
);

```

SQL Examples/Results

Examples:















```

1 -- Add locations
2 INSERT INTO locations (name, latitude, longitude, address) VALUES
3 ('UCF Main Campus', 28.6824, -81.2881, '4000 Central Florida Blvd, Orlando, FL 32816'),
4 ('MIT Campus', 42.3681, -71.0942, '77 Massachusetts Ave, Cambridge, MA 02139'),
5 ('Stanford University', 37.4275, -122.1697, '450 Serra Mall, Stanford, CA 94305');
6
7 -- Add universities
8 INSERT INTO universities (name, location_id) VALUES
9 ('University of Central Florida', 1),
10 ('Massachusetts Institute of Technology', 2),
11 ('Stanford University', 3);
12
13 -- Add Users
14 INSERT INTO users (name, email, password, role, university_id) VALUES
15 ('Alice Johnson', 'alice@knights.ucf.edu', 'hashed_password_1', 'student', 1),
16 ('Bob Smith', 'bob@mit.edu', 'hashed_password_2', 'student', 2),
17 ('Charlie Brown', 'charlie@stanford.edu', 'hashed_password_3', 'student', 3),
18 ('David Admin', 'admin@knights.ucf.edu', 'hashed_password_4', 'admin', 1),
19 ('Eve Admin', 'admin@mit.edu', 'hashed_password_5', 'admin', 2),
20 ('Super Admin', 'superadmin@supabase.com', 'hashed_password_6', 'super_admin', NULL);
21
22 -- Add RSOs (Registered Student Organizations)
23 INSERT INTO rsos (name, university_id, admin_id, is_active) VALUES
24 ('UCF Hackers', 1, (SELECT user_id FROM users WHERE email='admin@knights.ucf.edu'), TRUE),
25 ('MIT AI Club', 2, (SELECT user_id FROM users WHERE email='admin@mit.edu'), TRUE);
26
27 -- Insert RSO Members
28 INSERT INTO rso_members (rso_id, user_id) VALUES
29 ((SELECT rso_id FROM rsos WHERE name='UCF Hackers'), (SELECT user_id FROM users WHERE email='alice@knights.ucf.edu')),
30 ((SELECT rso_id FROM rsos WHERE name='MIT AI Club'), (SELECT user_id FROM users WHERE email='bob@mit.edu'));
31
32 -- Add Event Categories
33 INSERT INTO event_categories (category_name) VALUES
34 ('Tech Talk'),
35 ('Fundraising'),
36 ('Social'),
37 ('Sports');
38
39 -- Add events
40 INSERT INTO events (name, category_id, date, time, location_id, contact_email, created_by, rso_id, visibility, is_approved) VALUES
41 ('AI Workshop', 1, '2025-04-10', '18:00:00', 1, 'contact@ucf.edu', (SELECT user_id FROM users WHERE email='admin@knights.ucf.edu'), NULL, 'public', TRUE),
42 ('Hackathon 2025', 1, '2025-06-15', '09:00:00', 1, 'hack@ucf.edu', (SELECT user_id FROM users WHERE email='admin@knights.ucf.edu'), (SELECT rso_id FROM rsos WHERE name='UCF Hackers'), 'rso', TRUE),
43 ('MIT Fundraising Gala', 2, '2025-07-22', '19:30:00', 2, 'fundraising@mit.edu', (SELECT user_id FROM users WHERE email='admin@mit.edu'), NULL, 'private', TRUE);
44
45 -- Add Comments and Ratings
46 INSERT INTO comments (user_id, event_id, comment_text, rating, created_at) VALUES
47 ((SELECT user_id FROM users WHERE email='alice@knights.ucf.edu'), (SELECT event_id FROM events WHERE name='AI Workshop'), 'Excited for this event!', 5, NOW()),
48 ((SELECT user_id FROM users WHERE email='bob@mit.edu'), (SELECT event_id FROM events WHERE name='MIT Fundraising Gala'), 'Looks like a great initiative!', 4, NOW()),
49 ((SELECT user_id FROM users WHERE email='charlie@stanford.edu'), (SELECT event_id FROM events WHERE name='Hackathon 2025'), 'Can't wait to participate!', 5, NOW());
50







```

Results:






Insert a new RSO:

	 rso_id int4		name varchar		 university_id int4		 admin_id uuid		is_active bool	
	1		UCF Hackers		1		c8b18951-cdc4-46c9-840c-9e28a697616a		TRUE	
	2		MIT AI Club		2		f73daa7b-6d2c-4fbc-ad27-e374abf1b286		TRUE	




Join RSO:

	  rso_id int4	  user_id uuid
	1	aef68e17-54aa-466c-a0c5-e27c44a4df1c
	2	2ff2c109-e7c7-46fa-9a08-2e7dc4a1fbaa






Create Event:

 event_id int4	name varchar	 category_id int4	description text	date timestamp	 location... L...	contact_pho... varc...	contact_email varchar	 created_by uuid	 rso_id int4	visibility varchar	is_approved bool
1	AI Workshop	1	NULL	2025-04-10 00:00:00	1	NULL	contact@ucf.edu	c8b18951-cdc4-46c9-840c-9e28a697616a	NULL	public	TRUE
2	Hackathon 2025	1	NULL	2025-06-15 00:00:00	1	NULL	hack@ucf.edu	c8b18951-cdc4-46c9-840c-9e28a697616a	1	rso	TRUE
3	MIT Fundraising Gala	2	NULL	2025-04-09 01:09:48	2	NULL	fundraising@mit.edu	f73daa7b-6d2c-4fbc-ad27-e374abfb286	NULL	private	TRUE

Create Comment:

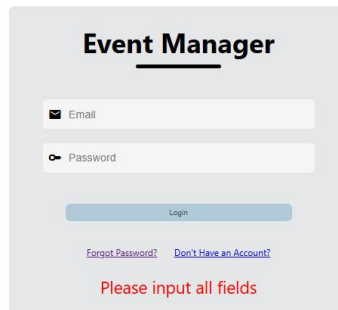
 comment_id int4	 user_id uuid	 event_id int4	comment_text text	rating int4	created_at timestamp
1	aef68e17-54aa-466c-a0c5-e27c44a4df1c	1	Excited for this event!	5	2025-03-21 20:29:10.729279
2	2ff2c109-e7c7-46fa-9a08-2e7dc4a1fbaa	3	Looks like a great initiative!	4	2025-03-21 20:29:10.729279
3	9b2b5be9-5531-473d-aea2-4dac38c021d8	2	Can't wait to participate!	5	2025-03-21 20:29:10.729279

Display Event for user:

 event_id int4	name varchar	 category_id int4	description text	date timestamp	 location... L...	contact_pho... varc...	contact_email varchar	 created_by uuid	 rso_id int4	visibility varchar	is_approved bool
1	AI Workshop	1	NULL	2025-04-10 00:00:00	1	NULL	contact@ucf.edu	c8b18951-cdc4-46c9-840c-9e28a697616a	NULL	public	TRUE
2	Hackathon 2025	1	NULL	2025-06-15 00:00:00	1	NULL	hack@ucf.edu	c8b18951-cdc4-46c9-840c-9e28a697616a	1	rso	TRUE
3	MIT Fundraising Gala	2	NULL	2025-04-09 01:09:48	2	NULL	fundraising@mit.edu	f73daa7b-6d2c-4fbc-ad27-e374abfb286	NULL	private	TRUE

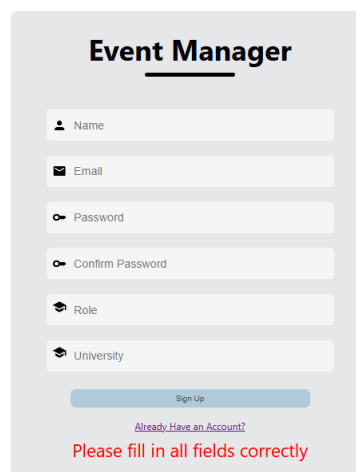
Constraint Enforcement

Empty fields at login



The image shows a login form titled "Event Manager". It contains two input fields: "Email" and "Password", both of which are empty. Below the fields is a "Login" button. At the bottom of the form, there are two links: "Forgot Password?" and "Don't Have an Account?". A red error message, "Please input all fields", is displayed at the bottom of the form.

Empty fields at sign up



The image shows a sign up form titled "Event Manager". It contains six input fields: "Name", "Email", "Password", "Confirm Password", "Role", and "University", all of which are empty. Below the fields is a "Sign Up" button. At the bottom of the form, there is a link "Already Have an Account?". A red error message, "Please fill in all fields correctly", is displayed at the bottom of the form.

Advanced Features

Add rating to event (stars)

Student Events Dashboard

UCF SuperAdmin
University of Central Florida
Logout

Upcoming Events Past Events My RSOs

Filter by Type: All Types

Hackathon 2025
Sun, Jun 15, 12:00 AM

UCF Main Campus
Public Tech Talk

☆☆☆☆ 4 (Not rated)

Comments (2)

taylorfinch 4/9/2025, 10:04:49 PM
Nice work!!!!

livedemo 4/10/2025, 2:40:49 AM
Awesome!

Add a comment...

Post

Share to Facebook Share to Twitter

AI Workshop
Thu, Apr 10, 12:00 AM

UCF Main Campus
Public Tech Talk

☆☆☆☆ 0 (Your rating: 5)

Comments (1)

testuser 4/10/2025, 2:05:29 AM
Excited to attend!!!!

Add a comment...

Post

Share to Facebook Share to Twitter

Python Workshop
Tue, Apr 15, 09:00 PM

UCF Main Campus
Public Tech Talk

☆☆☆☆ 0 (Not rated)

Comments (0)

Add a comment...

Post

Share to Facebook Share to Twitter

Knight Bakeoff
Fri, Apr 18, 05:48 PM

UCF Main Campus
Public Tech Talk

☆☆☆☆ 0 (Not rated)

Comments (0)

Add a comment...

Post

Conclusion

Creating the College Event Website using Supabase SQL provided a streamlined backend development experience by combining database hosting, authentication, and real-time features in a single platform. Supabase's PostgreSQL-based structure allowed us to define relational tables, enforce constraints, and execute complex queries while also simplifying user management through its built-in authentication system. T

Some desired features that could enhance the platform in future iterations include integration with university feeds like those from events.ucf.edu, enabling automatic import of official events, as well as broader social media integration for easier sharing and visibility of events via platforms like Facebook or Twitter.

One notable challenge was handling complex constraint enforcement within Supabase, such as preventing overlapping events at the same time and location, or dynamically changing the status of RSOs based on member count.