



WYD

What Ya Doin?

Prepared by: Group 7

Stephen Bennnett, Kenny Cheng, and Cameron Mortus

November 23, 2019
COP 4710 - Fall 2019

For:
Khan Vu
Department of Computer Science
University of Central Florida

Table of Contents

Prepared by: Group 7	1
PROJECT DESCRIPTION	4
GUI:	4
Platform,	4
Languages,	4
DBMS,	4
Image #1: Top Level View Of The DBMS (ignore Groups unused default django)	5
Image #2: Current RSOs	6
Image #3: Current Event	6
Image #4: Current Users	7
Create RSO,	8
Image #5: Creating RSOs	8
Create Event,	8
Image #6: Creating Events	8
View Event List,	9
Image #7: Viewing Your Upcoming Events	9
View Event Details	9
Image #8: Viewing The Details Of An Event	9
ER-Model:	10
Image #9: Our Initial ERD	10
RELATIONAL DATA MODEL	11
Image #10: Our Initial Relational Data Model	11
SAMPLE DATA	12
Table #1: Pre Populated Events	13
Table #2: Pre Populated Users	14
Table #3: Pre Populated RSOs	15
Table #4: Pre Populated Universities	15

SQL Examples And Results	16
Image #11: SQL New RSO	16
Image #12: SQL Adding Student To RSO	17
Image #13: SQL New Event	18
Image #14: SQL New Comment	18
Image #15: SQL Queries Display Events RSO	19
Image #16: SQL Queries Display Events Public & Private	20
CONSTRAINT ENFORCEMENT	21
Event creation constraints	21
Image #17: Event Creation With Overlapping Times Being Denied	21
RSO creation	22
Image #18: Create RSOs With Error States	22
Image #19: Create RSOs With Error States	22
Advanced Features:	23
Comment and Rating system	23
Image #20: Adding Comments	23
Email distribution system for RSOs	23
Image #21: Email Notifications For New Events Which They Have Permission To See	23
University Profile View	24
Image #22: University Event List View Page	24
CONCLUSIONS/OBSERVATIONS:	25

PROJECT DESCRIPTION

This is an event management system for colleges and their students, called What Ya Doin (WYD). The system allows colleges to show its students events, based on their privileges such as enrollment in the university or membership to a registered student organizations (RSOs). The site also allows students to share events with their friends and fellow students with the appropriate privileges by sharing the url.

The site takes into account the many social groups that students want to get involved in via our RSO system. The system also provides systems for students creating their own groups with others or join existing RSOs in their university. Users can also browse public events where they can interact with students of other universities or they can view university private event to show events with only their peers.

Platform:

The team chose to support all three major operating systems Linux, Windows, and Mac because each team member was working on a different platform. The development is also not tied down to an IDE, and developers can use their favorite text editor such as Visual Studio Code or Sublime. The team did however decide to just test on chrome to keep development as smooth as possible, although the website does render well on other browser we have used.

Languages:

This system uses Django, HTML, CSS, SQL, and Python. The Django framework provided a bulk of the features, while the use of html templates and css provided the majority of our front end.

DBMS,

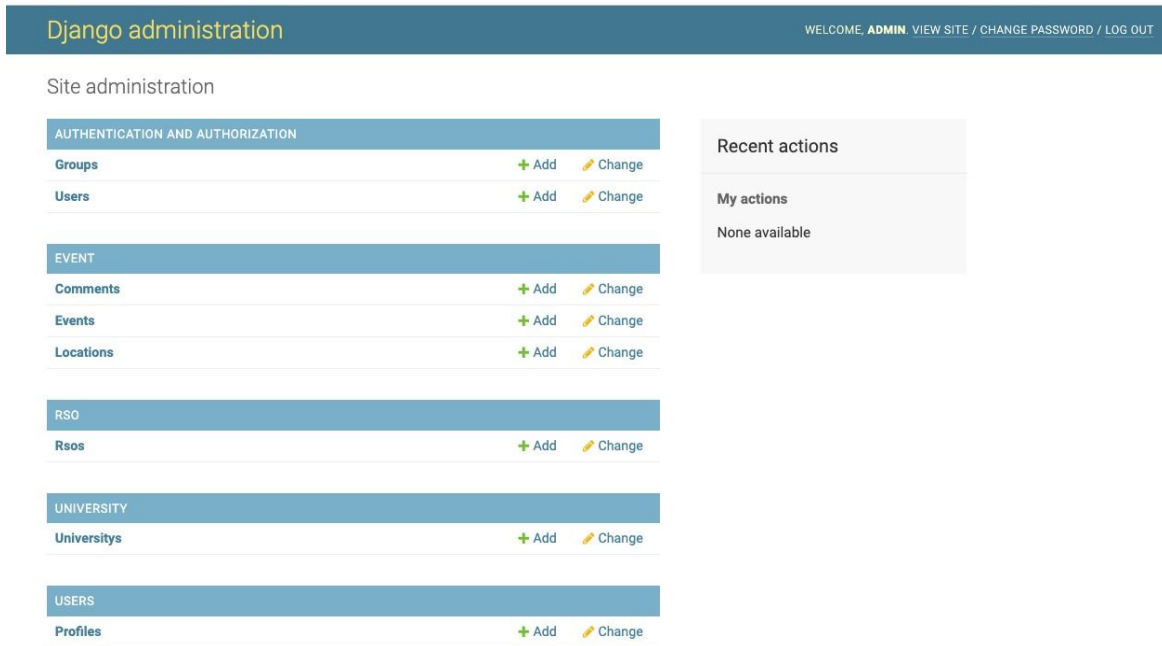


Image #1: Top Level View Of The DBMS (ignore Groups unused default django)

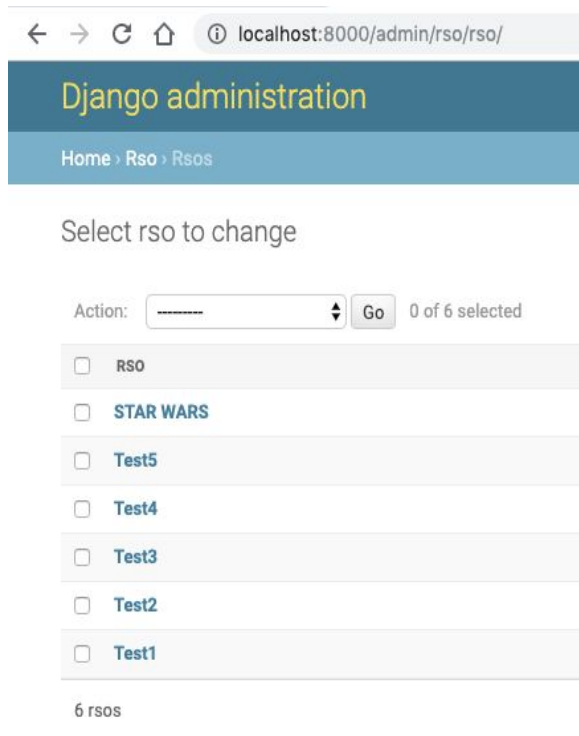


Image #2: Current RSOs

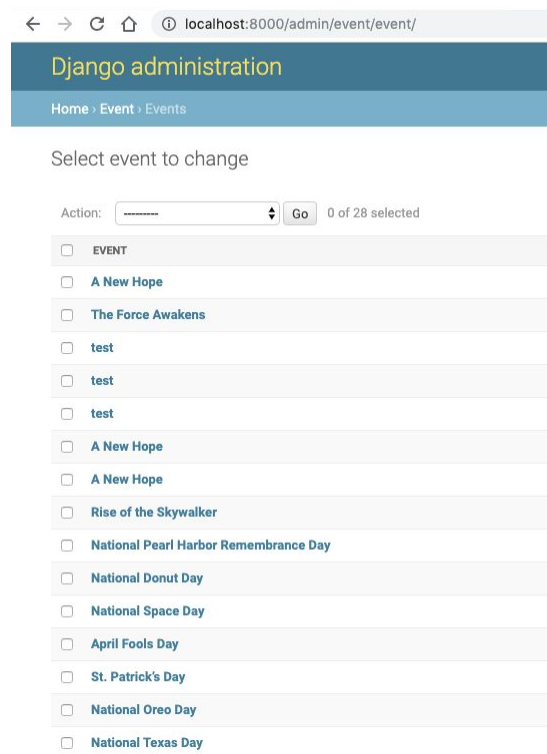
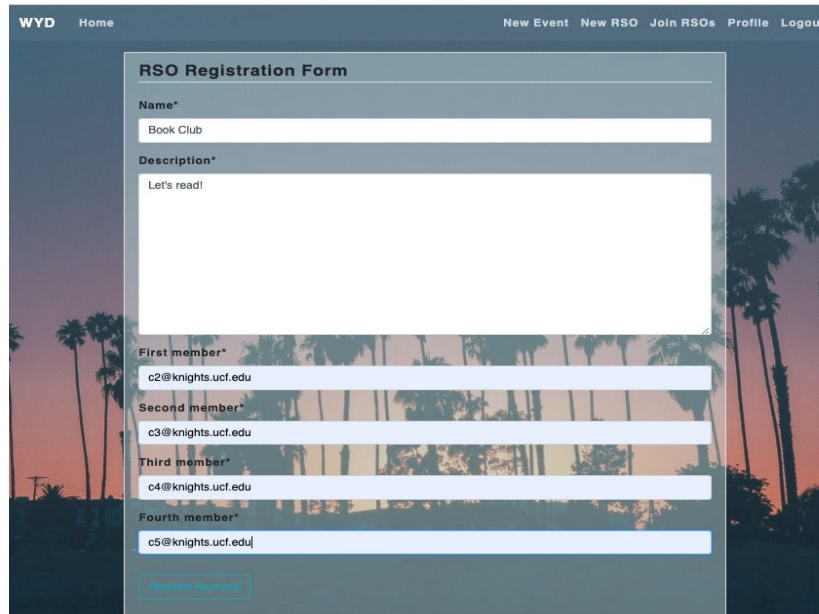


Image #3: Current Event

localhost:8000/admin/auth/user/					
<input type="checkbox"/>	USERNAME	EMAIL ADDRESS	FIRST NAME	LAST NAME	STAFF STATUS
<input type="checkbox"/>	admin	cmortus@knights.ucf.edu			✓
<input type="checkbox"/>	foo	c@knights.ucf.edu			✗
<input type="checkbox"/>	foo1	c@gmail.com			✗
<input type="checkbox"/>	foo10	c10@knights.ucf.edu			✗
<input type="checkbox"/>	foo11	c11@knights.ucf.edu			✗
<input type="checkbox"/>	foo12	c12@knights.ucf.edu			✗
<input type="checkbox"/>	foo13	c13@knights.ucf.edu			✗
<input type="checkbox"/>	foo14	c14@knights.ucf.edu			✗
<input type="checkbox"/>	foo15	c15@knights.ucf.edu			✗
<input type="checkbox"/>	foo16	c16@knights.ucf.edu			✗
<input type="checkbox"/>	foo17	c7@knights.ucf.edu			✗
<input type="checkbox"/>	foo18	c18@knights.ucf.edu			✗
<input type="checkbox"/>	foo19	c19@knights.ucf.edu			✗
<input type="checkbox"/>	foo2	c2@knights.ucf.edu			✗
<input type="checkbox"/>	foo20	c20@knights.ucf.edu			✗
<input type="checkbox"/>	foo3	c3@knights.ucf.edu			✗
<input type="checkbox"/>	foo4	c4@knights.ucf.edu			✗
<input type="checkbox"/>	foo5	c5@knights.ucf.edu			✗
<input type="checkbox"/>	foo6	c6@knights.ucf.edu			✗
<input type="checkbox"/>	foo7	c7@knights.ucf.edu			✗
<input type="checkbox"/>	foo8	c8@knights.ucf.edu			✗

Image #4: Current Users

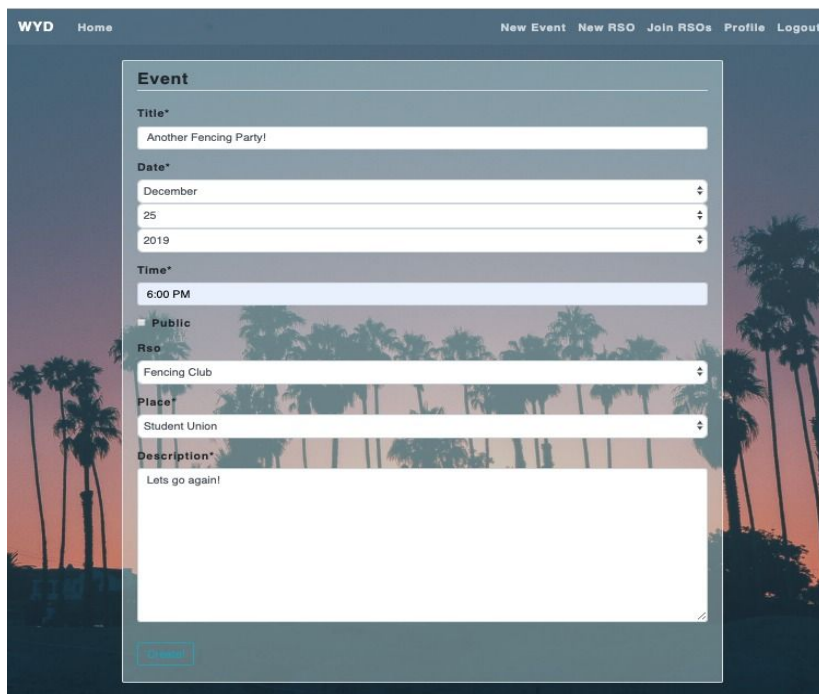
Create RSO,



The screenshot shows a web application interface for creating a Reading Student Organization (RSO). The background is a dark blue gradient with silhouettes of palm trees. At the top, there is a navigation bar with links: WYD, Home, New Event, New RSO, Join RSOs, Profile, and Logout. The main content area is titled "RSO Registration Form". It contains several input fields: "Name*" with the value "Book Club", "Description*" with the value "Let's read!", "First member*" with "c2@knights.ucf.edu", "Second member*" with "c3@knights.ucf.edu", "Third member*" with "c4@knights.ucf.edu", and "Fourth member*" with "c5@knights.ucf.edu". At the bottom of the form is a button labeled "Request Approval".

Image #5: Creating RSOs

Create Event,



The screenshot shows a web application interface for creating an event. The background is a dark blue gradient with silhouettes of palm trees. At the top, there is a navigation bar with links: WYD, Home, New Event, New RSO, Join RSOs, Profile, and Logout. The main content area is titled "Event". It contains several input fields: "Title*" with the value "Another Fencing Party!", "Date*" with a dropdown menu showing "December", "25", and "2019", "Time*" with the value "6:00 PM", a checkbox for "Public" which is checked, "Rso" with a dropdown menu showing "Fencing Club", "Place*" with a dropdown menu showing "Student Union", and "Description*" with the value "Lets go again!". At the bottom of the form is a button labeled "Create".

Image #6: Creating Events

View Event List,

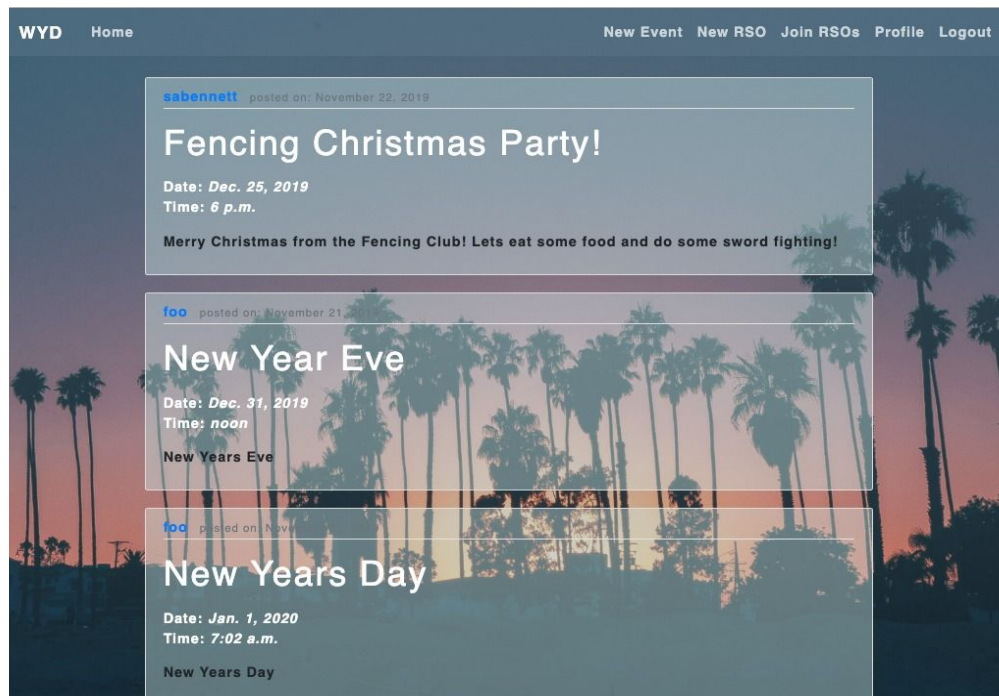


Image #7: Viewing Your Upcoming Events

View Event Details

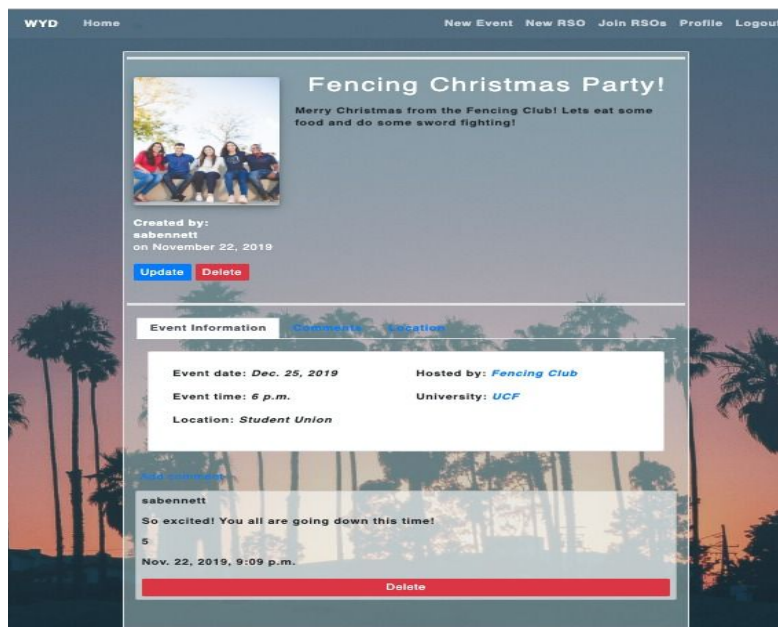


Image #8: Viewing The Details Of An Event

ER-Model:

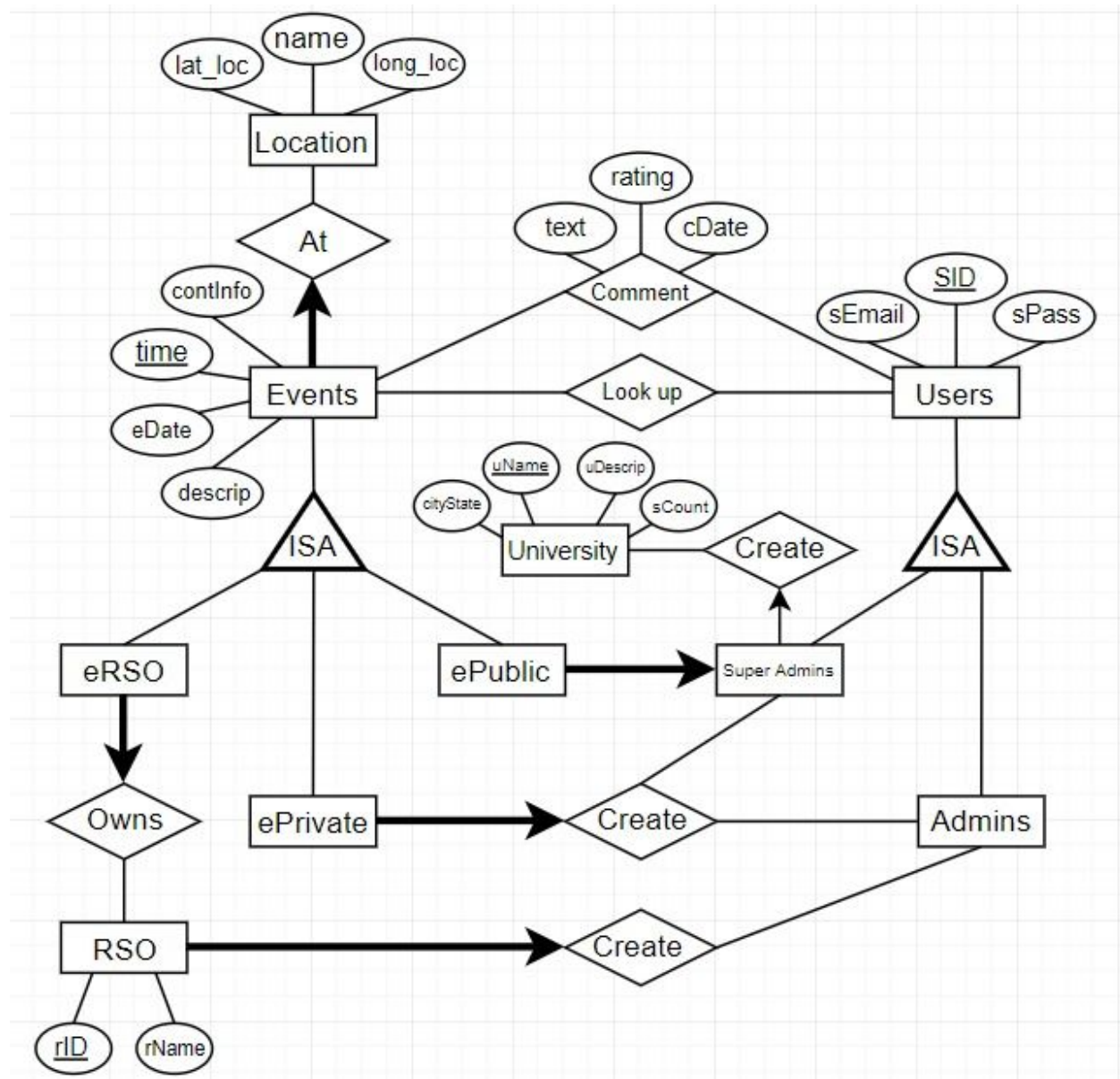


Image #9: Our Initial ERD

RELATIONAL DATA MODEL

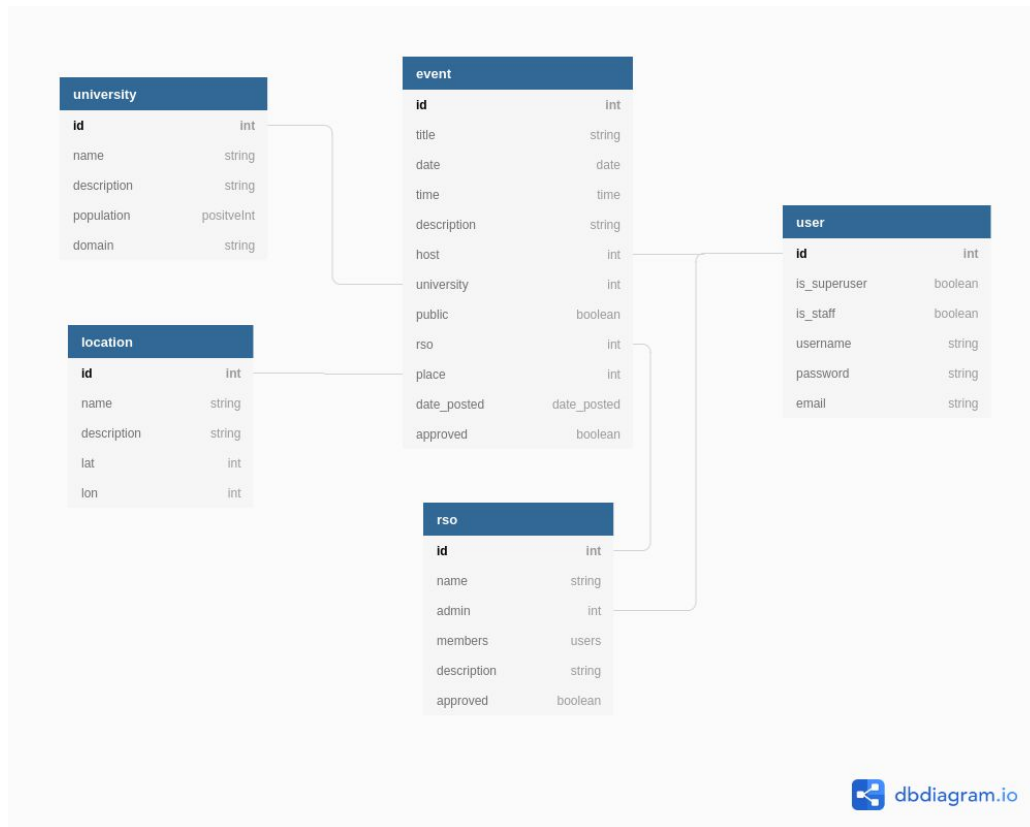


Image #10: Our Initial Relational Data Model

SAMPLE DATA

We pre populate the database with bash scripts in the github reference (“resetServer.sh” and the referenced .sh files). For reference of the database after population reference Pages 3-4 and the following tables.

title	date	time	descriptio n	host	univ	public	rso	approved	place
Presentation	2019-11-19	1:15 PM	Presenting Our Database	3	1	False	2	True	1
Testing2	2020-11-30	1:00 PM	TestData2	1	2	True	0	True	1
Turkey Day	2019-11-28	5:00 AM	Turkey Day	8	1	False	2	True	1
Christmas Eve	2019-12-24	12:05 AM	Christmas Eve	2	1	False	1	True	1
New Years Day	2020-1-1	7:02 PM	New Years Day	2	1	False	1	True	1
Christmas	2019-12-25	6:00 PM	Christmas	2	1	False	1	True	1
Valentines Day	2020-2-14	12:00 AM	Valentines Day	2	1	False	1	True	1
4th of July19	2019-7-4	4:30 AM	4th of July 2019	2	1	False	1	True	1
4th of July20	2020-7-4	1:22 PM	4th of July	2	1	False	1	True	1
Cinco De Mayo	2020-5-4	5:04 PM	Cinco de Mayo	2	1	False	1	True	1
Pi Day	2020-3-14	1:59 PM	Pi Day 3.14159	2	1	False	1	True	1
New Year Eve	2019-12-31	12:00 AM	New Years Eve	2	1	False	1	True	1

Star Wars Day	2020-5-4	12:00 AM	May The Fourth Be With You	2	1	False	1	True	1
National Texas Day	2020-2-1	12:01 AM	EVERYTHING IS BIGGER IN TEXAS!!!	2	1	False	1	True	1
National Oreo Day	2020-3-6	12:58 AM	National Oreo Day	2	1	False	1	True	1
St. Patrick's Day	2020-3-17	12:00 AM	Luck Of The Irish	2	1	False	1	True	1
April Fools Day	2019-4-1	12:00 AM	April Fools Day	2	1	False	1	True	1
National Space Day	2020-5-3	12:00 AM	National Space Day	2	1	False	1	True	1
National Donut Day	2020-6-7	12:00 AM	National Donut Day	2	1	False	1	True	1
National Pearl Harbor Remembrance Day	2019-12-7	12:00 AM	National Pearl Harbor Remembrance Day	2	1	False	1	True	1
Rise of the Skywalker	2019-12-20	4:00 PM	Use the Force!	2	1	False	1	True	1

Table #1: Pre Populated Events

Note: if rso == 0 then the event is public

username	password	is_superuser	is_staff	email
admin	adminpass	True	False	mortus@knights.ucf.edu
foo	bar	False	False	c@knights.ucf.edu
foo1	bar	False	False	c@gmail.com
foo2	bar	False	False	c2@knights.ucf.edu
foo3	bar	False	False	c3@knights.ucf.edu
foo4	bar	False	False	c4@knights.ucf.edu
foo5	bar	False	False	c5@knights.ucf.edu
foo6	bar	False	False	c6@knights.ucf.edu
foo7	bar	False	False	c7@knights.ucf.edu
foo8	bar	False	False	c8@knights.ucf.edu
foo9	bar	False	False	c9@knights.ucf.edu
foo10	bar	False	False	c10@knights.ucf.edu
foo11	bar	False	False	c11@knights.ucf.edu
foo12	bar	False	False	c12@knights.ucf.edu
foo13	bar	False	False	c13@knights.ucf.edu
foo14	bar	False	False	c14@knights.ucf.edu
foo15	bar	False	False	c15@knights.ucf.edu
foo16	bar	False	False	c16@knights.ucf.edu
foo17	bar	False	False	c17@knights.ucf.edu
foo18	bar	False	False	c18@knights.ucf.edu
foo19	bar	False	False	c19@knights.ucf.edu
foo20	bar	False	False	c20@knights.ucf.edu

Table #2: Pre Populated Users

admin id	name	description	approved	University id	mem	mem	mem	mem
1	Test1	TestData	True	1	2	3	4	5
2	Test2	TestData	True	1	6	8	9	7
3	Test3	TestData	True	1	10	11	12	13
10	Test4	TestData	True	1	14	15	16	17
15	Test5	TestData	True	1	18	19	20	1

Table #3: Pre Populated RSOs

name	description	population	domain
UCF	UCF	10000	ucf.edu
Phoenix University	Phoenix University	10000	gmail.com
Florida International University	Florida International University	11000	yahoo.com
University Of South Florida	University Of South Florida	10000	aol.com
University Of Florida	University Of Florida	10000	msn.com

Table #4: Pre Populated Universities

SQL Examples And Results

- A. SQL statement to insert a new RSO (part of the processing of the 'Create RSO' form),
show results

```
SQLite version 3.22.0 2018-01-22 18:45:57
Enter ".help" for usage hints.
sqlite> .mode column
sqlite> .width 2 10 50 2 2 2
sqlite> SELECT * from rso_rso;
1  Test1      TestData                1   1   1
2  Test2      TestData                1   2   1
3  Test3      TestData                1   3   1
4  Test4      TestData                1  10   1
5  Test5      TestData                1  15   1
6  RSO Insert This is a SQL test to insert an RSO        1  15   1
sqlite> INSERT INTO rso_rso VALUES(7, 'RSO Insert2', 'Nicer looking insert', 1, 15, 1);
sqlite> SELECT * from rso_rso;
1  Test1      TestData                1   1   1
2  Test2      TestData                1   2   1
3  Test3      TestData                1   3   1
4  Test4      TestData                1  10   1
5  Test5      TestData                1  15   1
6  RSO Insert This is a SQL test to insert an RSO        1  15   1
7  RSO Insert Nicer looking insert                        1  15   1
sqlite>
```

Image #11: SQL New RSO

- B. SQL statement to insert a new student to an existing RSO (part of the processing of the 'Join RSO' form), show results

```
sqlite> SELECT * from rso_rso_members;
1      1      2
2      1      3
3      1      4
4      1      5
5      2      6
6      2      8
7      2      9
8      2      7
9      3     10
10     3     11
11     3     12
12     3     13
13     4     14
14     4     15
15     4     16
16     4     17
17     5     18
18     5     19
19     5     20
20     5      1
sqlite> INSERT INTO rso_rso_members VALUES(21, 7, 21);
sqlite> SELECT * from rso_rso_members;
1      1      2
2      1      3
3      1      4
4      1      5
5      2      6
6      2      8
7      2      9
8      2      7
9      3     10
10     3     11
11     3     12
12     3     13
13     4     14
14     4     15
15     4     16
16     4     17
17     5     18
18     5     19
19     5     20
20     5      1
21     7     21
sqlite>
```

Image #12: SQL Adding Student To RSO

C. SQL statement to insert a new event (part of the processing of the 'Create Event' form), show results

```

16 St. Patrick's D 2020-03-17 12:00:00 Luck Of The Irish 0 2019-11-23 03:11:34.678748 1 2 1 1 1
17 April Fools Day 2019-04-01 12:00:00 April Fools Day 0 2019-11-23 03:11:35.296140 1 2 1 1 1
18 National Space 2020-05-03 12:00:00 National Space Day 0 2019-11-23 03:11:35.933945 1 2 1 1 1
19 National Donut 2020-06-07 12:00:00 National Donut Day 0 2019-11-23 03:11:36.524528 1 2 1 1 1
20 National Pearl 2019-12-07 12:00:00 National Pearl Harbor Rem 0 2019-11-23 03:11:37.131490 1 2 1 1 1
21 Rise of the Sky 2019-12-20 04:00:00 Use the Force! 0 2019-11-23 03:11:37.717696 1 2 1 1 1
22 Event INSERT te 1977 01:00 PM Testing the INSERT 0 2019-11-23 0 1 2 1 1 1

sqlite> DELETE FROM event_event WHERE id = 22;
sqlite> SELECT * from event_event;
1 Presentation 2019-11-19 01:15:00 Presenting Our Database 0 2019-11-23 03:11:24.801635 1 3 1 1 1
2 Testing2 2020-11-30 01:00:00 TestData2 1 2019-11-23 03:11:25.412559 1 1 1 2
3 Turkey Day 2019-11-28 05:00:00 Turkey Day 0 2019-11-23 03:11:26.088476 1 8 1 2 1
4 Christmas Eve 2019-12-24 12:05:00 Christmas Eve 0 2019-11-23 03:11:26.783740 1 2 1 1 1
5 New Years Day 2020-01-01 07:02:00 New Years Day 0 2019-11-23 03:11:27.490297 1 2 1 1 1
6 Christmas 2019-12-25 06:00:00 Christmas 0 2019-11-23 03:11:28.164815 1 2 1 1 1
7 Valentines Day 2020-02-14 12:00:00 Valentines Day 0 2019-11-23 03:11:28.822315 1 2 1 1 1
8 4th of July19 2019-07-04 04:30:00 4th of July 2019 0 2019-11-23 03:11:29.474734 1 2 1 1 1
9 4th of July20 2020-07-04 01:22:00 4th of July 0 2019-11-23 03:11:30.152549 1 2 1 1 1
10 Cinco De Mayo 2020-05-04 05:04:00 Cinco de Mayo 0 2019-11-23 03:11:30.794720 1 2 1 1 1
11 Pt Day 2020-03-14 01:59:00 Pt Day 3.14159 LOL 0 2019-11-23 03:11:31.434340 1 2 1 1 1
12 New Year Eve 2019-12-31 12:00:00 New Years Eve 0 2019-11-23 03:11:32.078598 1 2 1 1 1
13 Star Wars Day 2020-05-04 12:00:00 May The Fourth Be With Yo 0 2019-11-23 03:11:32.728244 1 2 1 1 1
14 National Texas 2020-02-01 12:01:00 EVERYTHING IS BIGGER IN T 0 2019-11-23 03:11:33.446858 1 2 1 1 1
15 National Oreo D 2020-03-06 12:58:00 National Oreo Day 0 2019-11-23 03:11:34.082750 1 2 1 1 1
16 St. Patrick's D 2020-03-17 12:00:00 Luck Of The Irish 0 2019-11-23 03:11:34.678748 1 2 1 1 1
17 April Fools Day 2019-04-01 12:00:00 April Fools Day 0 2019-11-23 03:11:35.296140 1 2 1 1 1
18 National Space 2020-05-03 12:00:00 National Space Day 0 2019-11-23 03:11:35.933945 1 2 1 1 1
19 National Donut 2020-06-07 12:00:00 National Donut Day 0 2019-11-23 03:11:36.524528 1 2 1 1 1
20 National Pearl 2019-12-07 12:00:00 National Pearl Harbor Rem 0 2019-11-23 03:11:37.131490 1 2 1 1 1
21 Rise of the Sky 2019-12-20 04:00:00 Use the Force! 0 2019-11-23 03:11:37.717696 1 2 1 1 1
sqlite> INSERT INTO event_event VALUES(22, 'Event INSERT test', '2019-12-30', '01:00 PM', 'Testing the INESRT', 0, '2019-11-23 02:01:11.111111', '01:00 PM', 1, 2, 1, 1, 1);
sqlite> SELECT * from event_event;
1 Presentation 2019-11-19 01:15:00 Presenting Our Database 0 2019-11-23 03:11:24.801635 1 3 1 1 1
2 Testing2 2020-11-30 01:00:00 TestData2 1 2019-11-23 03:11:25.412559 1 1 1 2
3 Turkey Day 2019-11-28 05:00:00 Turkey Day 0 2019-11-23 03:11:26.088476 1 8 1 2 1
4 Christmas Eve 2019-12-24 12:05:00 Christmas Eve 0 2019-11-23 03:11:26.783740 1 2 1 1 1
5 New Years Day 2020-01-01 07:02:00 New Years Day 0 2019-11-23 03:11:27.490297 1 2 1 1 1
6 Christmas 2019-12-25 06:00:00 Christmas 0 2019-11-23 03:11:28.164815 1 2 1 1 1
7 Valentines Day 2020-02-14 12:00:00 Valentines Day 0 2019-11-23 03:11:28.822315 1 2 1 1 1
8 4th of July19 2019-07-04 04:30:00 4th of July 2019 0 2019-11-23 03:11:29.474734 1 2 1 1 1
9 4th of July20 2020-07-04 01:22:00 4th of July 0 2019-11-23 03:11:30.152549 1 2 1 1 1
10 Cinco De Mayo 2020-05-04 05:04:00 Cinco de Mayo 0 2019-11-23 03:11:30.794720 1 2 1 1 1
11 Pt Day 2020-03-14 01:59:00 Pt Day 3.14159 LOL 0 2019-11-23 03:11:31.434340 1 2 1 1 1
12 New Year Eve 2019-12-31 12:00:00 New Years Eve 0 2019-11-23 03:11:32.078598 1 2 1 1 1
13 Star Wars Day 2020-05-04 12:00:00 May The Fourth Be With Yo 0 2019-11-23 03:11:32.728244 1 2 1 1 1
14 National Texas 2020-02-01 12:01:00 EVERYTHING IS BIGGER IN T 0 2019-11-23 03:11:33.446858 1 2 1 1 1
15 National Oreo D 2020-03-06 12:58:00 National Oreo Day 0 2019-11-23 03:11:34.082750 1 2 1 1 1
16 St. Patrick's D 2020-03-17 12:00:00 Luck Of The Irish 0 2019-11-23 03:11:34.678748 1 2 1 1 1
17 April Fools Day 2019-04-01 12:00:00 April Fools Day 0 2019-11-23 03:11:35.296140 1 2 1 1 1
18 National Space 2020-05-03 12:00:00 National Space Day 0 2019-11-23 03:11:35.933945 1 2 1 1 1
19 National Donut 2020-06-07 12:00:00 National Donut Day 0 2019-11-23 03:11:36.524528 1 2 1 1 1
20 National Pearl 2019-12-07 12:00:00 National Pearl Harbor Rem 0 2019-11-23 03:11:37.131490 1 2 1 1 1
21 Rise of the Sky 2019-12-20 04:00:00 Use the Force! 0 2019-11-23 03:11:37.717696 1 2 1 1 1
22 Event INSERT te 2019-12-30 01:00 PM Testing the INESRT 0 2019-11-23 02:01:11.111111 0 1 2 1 1 1
sqlite>

```

Image #13: SQL New Event

D. SQL statement to insert/update a (new) comment (part of the processing of the 'Create/Add/Modify Comment' form), show results

```

sqlite> SELECT * from event_comment;
1 2019-11-23 03:11:38.360384 2 Hello 2 1
2 2019-11-23 03:11:38.988621 5 Happy Thanksgiving! 7 3
3 2019-11-23 03:11:39.639322 5 Merry Christmas! 5 6
4 2019-11-23 03:11:40.364241 5 Merry Christmas! 4 6
5 2019-11-23 03:11:41.032153 5 Merry Christmas! 3 6
6 2019-11-23 03:11:41.682760 5 Merry Christmas! 4 6
7 2019-11-23 03:11:42.330355 5 Luke I Am Your Father Wasnt Even In The Original Movie 2 21
8 2019-11-23 03:11:42.988145 5 I want a hippopotamus for Christmas Only a hippopotamus will do I dont want a doll, no dinkey tinker 2 4
sqlite> INSERT INTO event_comment VALUES(9, '2019-11-23 11:40:00.000000', 3, 'Event comment test. We still want a hippopotamus', 5, 22);
sqlite> SELECT * from event_comment;
1 2019-11-23 03:11:38.360384 2 Hello 2 1
2 2019-11-23 03:11:38.988621 5 Happy Thanksgiving! 7 3
3 2019-11-23 03:11:39.639322 5 Merry Christmas! 5 6
4 2019-11-23 03:11:40.364241 5 Merry Christmas! 4 6
5 2019-11-23 03:11:41.032153 5 Merry Christmas! 3 6
6 2019-11-23 03:11:41.682760 5 Merry Christmas! 4 6
7 2019-11-23 03:11:42.330355 5 Luke I Am Your Father Wasnt Even In The Original Movie 2 21
8 2019-11-23 03:11:42.988145 5 I want a hippopotamus for Christmas Only a hippopotamus will do I dont want a doll, no dinkey tinker 2 4
9 2019-11-23 11:40:00.000000 3 Event comment test. We still want a hippopotamus 5 22
sqlite>

```

Image #14: SQL New Comment

E. Several SQL queries to display events—public, private, and RSO-- (part of the processing of the ‘View Event’ request by a user with a specific role), show results

```

sqlite> select * from event_event;
1 Presentati 2019-11-19 01:15:00 Presenting Our Database 0 2019-11-23 03:11:24.801 1 3 1 1 1
2 Testing2 2020-11-30 01:00:00 TestData2 1 2019-11-23 03:11:25.412 1 1 1 2
3 Turkey Day 2019-11-28 05:00:00 Turkey Day 0 2019-11-23 03:11:26.088 1 8 1 2 1
4 Christmas 2019-12-24 12:05:00 Christmas Eve 0 2019-11-23 03:11:26.783 1 2 1 1 1
5 New Years 2020-01-01 07:02:00 New Years Day 0 2019-11-23 03:11:27.490 1 2 1 1 1
6 Christmas 2019-12-25 06:00:00 Christmas 0 2019-11-23 03:11:28.164 1 2 1 1 1
7 Valentines 2020-02-14 12:00:00 Valentines Day 0 2019-11-23 03:11:28.822 1 2 1 1 1
8 4th of Jul 2019-07-04 04:30:00 4th of July 2019 0 2019-11-23 03:11:29.474 1 2 1 1 1
9 4th of Jul 2020-07-04 01:22:00 4th of July 0 2019-11-23 03:11:30.152 1 2 1 1 1
10 Cinco De M 2020-05-04 05:04:00 Cinco de Mayo 0 2019-11-23 03:11:30.794 1 2 1 1 1
11 Pi Day 2020-03-14 01:59:00 Pi Day 3.14159 LOL 0 2019-11-23 03:11:31.434 1 2 1 1 1
12 New Year E 2019-12-31 12:00:00 New Years Eve 0 2019-11-23 03:11:32.078 1 2 1 1 1
13 Star Wars 2020-05-04 12:00:00 May The Fourth Be With Yo 0 2019-11-23 03:11:32.728 1 2 1 1 1
14 National T 2020-02-01 12:01:00 EVERYTHING IS BIGGER IN T 0 2019-11-23 03:11:33.446 1 2 1 1 1
15 National O 2020-03-06 12:58:00 National Oreo Day 0 2019-11-23 03:11:34.082 1 2 1 1 1
16 St. Patric 2020-03-17 12:00:00 Luck Of The Irish 0 2019-11-23 03:11:34.678 1 2 1 1 1
17 April Fool 2019-04-01 12:00:00 April Fools Day 0 2019-11-23 03:11:35.296 1 2 1 1 1
18 National S 2020-05-03 12:00:00 National Space Day 0 2019-11-23 03:11:35.933 1 2 1 1 1
19 National D 2020-06-07 12:00:00 National Donut Day 0 2019-11-23 03:11:36.524 1 2 1 1 1
20 National P 2019-12-07 12:00:00 National Pearl Harbor Rem 0 2019-11-23 03:11:37.131 1 2 1 1 1
21 Rise of th 2019-12-20 04:00:00 Use the Force! 0 2019-11-23 03:11:37.717 1 2 1 1 1
22 Event INSE 2019-12-30 01:00 PM Testing the INESRT 0 2019-11-23 02:01:11.111 01 1 2 1 1 1
sqlite> select * from event_event WHERE rso_id = 2;
3 Turkey Day 2019-11-28 05:00:00 Turkey Day 0 2019-11-23 03:11:26.088 1 8 1 2 1
sqlite> select * from event_event WHERE rso_id = 1;
1 Presentati 2019-11-19 01:15:00 Presenting Our Database 0 2019-11-23 03:11:24.801 1 3 1 1 1
4 Christmas 2019-12-24 12:05:00 Christmas Eve 0 2019-11-23 03:11:26.783 1 2 1 1 1
5 New Years 2020-01-01 07:02:00 New Years Day 0 2019-11-23 03:11:27.490 1 2 1 1 1
6 Christmas 2019-12-25 06:00:00 Christmas 0 2019-11-23 03:11:28.164 1 2 1 1 1
7 Valentines 2020-02-14 12:00:00 Valentines Day 0 2019-11-23 03:11:28.822 1 2 1 1 1
8 4th of Jul 2019-07-04 04:30:00 4th of July 2019 0 2019-11-23 03:11:29.474 1 2 1 1 1
9 4th of Jul 2020-07-04 01:22:00 4th of July 0 2019-11-23 03:11:30.152 1 2 1 1 1
10 Cinco De M 2020-05-04 05:04:00 Cinco de Mayo 0 2019-11-23 03:11:30.794 1 2 1 1 1
11 Pi Day 2020-03-14 01:59:00 Pi Day 3.14159 LOL 0 2019-11-23 03:11:31.434 1 2 1 1 1
12 New Year E 2019-12-31 12:00:00 New Years Eve 0 2019-11-23 03:11:32.078 1 2 1 1 1
13 Star Wars 2020-05-04 12:00:00 May The Fourth Be With Yo 0 2019-11-23 03:11:32.728 1 2 1 1 1
14 National T 2020-02-01 12:01:00 EVERYTHING IS BIGGER IN T 0 2019-11-23 03:11:33.446 1 2 1 1 1
15 National O 2020-03-06 12:58:00 National Oreo Day 0 2019-11-23 03:11:34.082 1 2 1 1 1
16 St. Patric 2020-03-17 12:00:00 Luck Of The Irish 0 2019-11-23 03:11:34.678 1 2 1 1 1
17 April Fool 2019-04-01 12:00:00 April Fools Day 0 2019-11-23 03:11:35.296 1 2 1 1 1
18 National S 2020-05-03 12:00:00 National Space Day 0 2019-11-23 03:11:35.933 1 2 1 1 1
19 National D 2020-06-07 12:00:00 National Donut Day 0 2019-11-23 03:11:36.524 1 2 1 1 1
20 National P 2019-12-07 12:00:00 National Pearl Harbor Rem 0 2019-11-23 03:11:37.131 1 2 1 1 1
21 Rise of th 2019-12-20 04:00:00 Use the Force! 0 2019-11-23 03:11:37.717 1 2 1 1 1
22 Event INSE 2019-12-30 01:00 PM Testing the INESRT 0 2019-11-23 02:01:11.111 01 1 2 1 1 1
sqlite>

```

Image #15: SQL Queries Display Events RSO


```

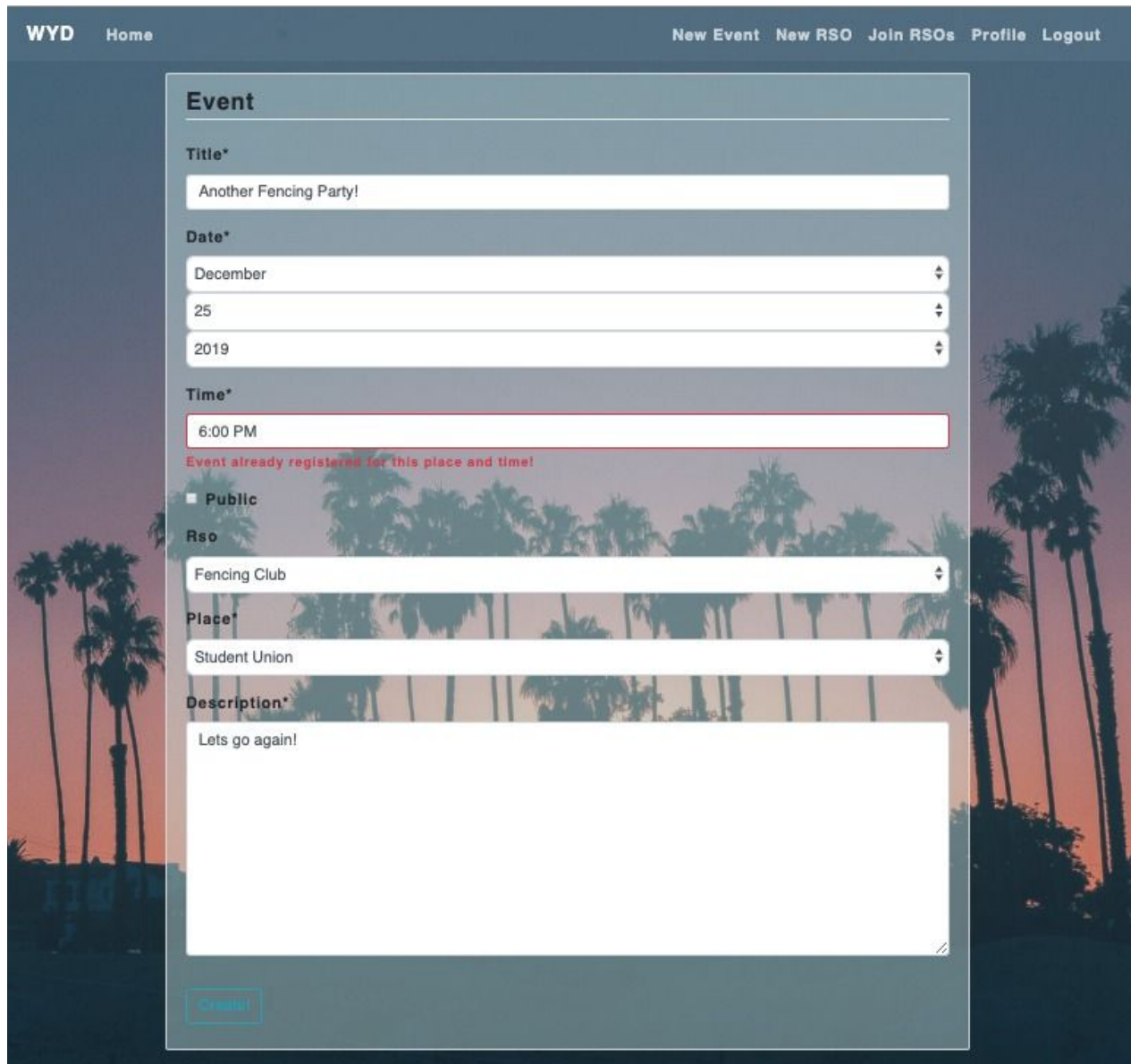
sqlite> SELECT * from event_event;
1 Presentation 2019-11-19 01:15:00 Presenting Our Database 0 2019-11-23 1 3 1 1 1
2 Testing2 2020-11-30 01:00:00 TestData2 1 2019-11-23 1 1 1 2
3 Turkey Day 2019-11-28 05:00:00 Turkey Day 0 2019-11-23 1 8 1 2 1
4 Christmas Eve 2019-12-24 12:05:00 Christmas Eve 0 2019-11-23 1 2 1 1 1
5 New Years Day 2020-01-01 07:02:00 New Years Day 0 2019-11-23 1 2 1 1 1
6 Christmas 2019-12-25 06:00:00 Christmas 0 2019-11-23 1 2 1 1 1
7 Valentines Day 2020-02-14 12:00:00 Valentines Day 0 2019-11-23 1 2 1 1 1
8 4th of July19 2019-07-04 04:30:00 4th of July 2019 0 2019-11-23 1 2 1 1 1
9 4th of July20 2020-07-04 01:22:00 4th of July 0 2019-11-23 1 2 1 1 1
10 Cinco De Mayo 2020-05-04 05:04:00 Cinco de Mayo 0 2019-11-23 1 2 1 1 1
11 Pi Day 2020-03-14 01:59:00 Pi Day 3.14159 LOL 0 2019-11-23 1 2 1 1 1
12 New Year Eve 2019-12-31 12:00:00 New Years Eve 0 2019-11-23 1 2 1 1 1
13 Star Wars Day 2020-05-04 12:00:00 May The Fourth Be With You 0 2019-11-23 1 2 1 1 1
14 National Texas 2020-02-01 12:01:00 EVERYTHING IS BIGGER IN TEXAS!!! 0 2019-11-23 1 2 1 1 1
15 National Oreo D 2020-03-06 12:58:00 National Oreo Day 0 2019-11-23 1 2 1 1 1
16 St. Patrick's D 2020-03-17 12:00:00 Luck Of The Irish 0 2019-11-23 1 2 1 1 1
17 April Fools Day 2019-04-01 12:00:00 April Fools Day 0 2019-11-23 1 2 1 1 1
18 National Space 2020-05-03 12:00:00 National Space Day 0 2019-11-23 1 2 1 1 1
19 National Donut 2020-06-07 12:00:00 National Donut Day 0 2019-11-23 1 2 1 1 1
20 National Pearl 2019-12-07 12:00:00 National Pearl Harbor Remembrance Day 0 2019-11-23 1 2 1 1 1
21 Rise of the Sky 2019-12-20 04:00:00 Use the Force! 0 2019-11-23 1 2 1 1 1
22 Event INSERT te 2019-12-30 01:00 PM Testing the INESRT 0 2019-11-23 01:00 PM 1 2 1 1 1
23 Public Test Eve 2020-01-01 13:00:00 This is a public event not tied to an RSO 1 2019-11-23 0 2 2 1
24 Private event 2020-01-02 14:00:00 This is a private event not linked to a RSO 0 2019-11-23 0 2 2 1
sqlite> SELECT * from event_event WHERE public = 0;
1 Presentation 2019-11-19 01:15:00 Presenting Our Database 0 2019-11-23 1 3 1 1 1
3 Turkey Day 2019-11-28 05:00:00 Turkey Day 0 2019-11-23 1 8 1 2 1
4 Christmas Eve 2019-12-24 12:05:00 Christmas Eve 0 2019-11-23 1 2 1 1 1
5 New Years Day 2020-01-01 07:02:00 New Years Day 0 2019-11-23 1 2 1 1 1
6 Christmas 2019-12-25 06:00:00 Christmas 0 2019-11-23 1 2 1 1 1
7 Valentines Day 2020-02-14 12:00:00 Valentines Day 0 2019-11-23 1 2 1 1 1
8 4th of July19 2019-07-04 04:30:00 4th of July 2019 0 2019-11-23 1 2 1 1 1
9 4th of July20 2020-07-04 01:22:00 4th of July 0 2019-11-23 1 2 1 1 1
10 Cinco De Mayo 2020-05-04 05:04:00 Cinco de Mayo 0 2019-11-23 1 2 1 1 1
11 Pi Day 2020-03-14 01:59:00 Pi Day 3.14159 LOL 0 2019-11-23 1 2 1 1 1
12 New Year Eve 2019-12-31 12:00:00 New Years Eve 0 2019-11-23 1 2 1 1 1
13 Star Wars Day 2020-05-04 12:00:00 May The Fourth Be With You 0 2019-11-23 1 2 1 1 1
14 National Texas 2020-02-01 12:01:00 EVERYTHING IS BIGGER IN TEXAS!!! 0 2019-11-23 1 2 1 1 1
15 National Oreo D 2020-03-06 12:58:00 National Oreo Day 0 2019-11-23 1 2 1 1 1
16 St. Patrick's D 2020-03-17 12:00:00 Luck Of The Irish 0 2019-11-23 1 2 1 1 1
17 April Fools Day 2019-04-01 12:00:00 April Fools Day 0 2019-11-23 1 2 1 1 1
18 National Space 2020-05-03 12:00:00 National Space Day 0 2019-11-23 1 2 1 1 1
19 National Donut 2020-06-07 12:00:00 National Donut Day 0 2019-11-23 1 2 1 1 1
20 National Pearl 2019-12-07 12:00:00 National Pearl Harbor Remembrance Day 0 2019-11-23 1 2 1 1 1
21 Rise of the Sky 2019-12-20 04:00:00 Use the Force! 0 2019-11-23 1 2 1 1 1
22 Event INSERT te 2019-12-30 01:00 PM Testing the INESRT 0 2019-11-23 01:00 PM 1 2 1 1 1
24 Private event 2020-01-02 14:00:00 This is a private event not linked to a RSO 0 2019-11-23 0 2 2 1
sqlite> SELECT * from event_event WHERE public = 0 AND rso_id IS NULL;
24 Private event 2020-01-02 14:00:00 This is a private event not linked to a RSO 0 2019-11-23 0 2 2 1
sqlite> SELECT * from event_event WHERE public = 1 AND rso_id IS NULL;
2 Testing2 2020-11-30 01:00:00 TestData2 1 2019-11-23 1 1 1 2
23 Public Test Eve 2020-01-01 13:00:00 This is a public event not tied to an RSO 1 2019-11-23 0 2 2 1
sqlite>

```

Image #16: SQL Queries Display Events Public & Private
First query is public. Second is private.

CONSTRAINT ENFORCEMENT

Event creation constraints



The screenshot shows a web application interface for creating an event. The background is a dark blue gradient with silhouettes of palm trees. The top navigation bar includes 'WYD' and 'Home' on the left, and 'New Event', 'New RSO', 'Join RSOs', 'Profile', and 'Logout' on the right. The main form is titled 'Event' and contains several input fields: 'Title*' with the value 'Another Fencing Party!', 'Date*' with a date picker set to December 25, 2019, 'Time*' with the value '6:00 PM', a 'Public' checkbox, 'Rso' with a dropdown menu showing 'Fencing Club', 'Place*' with a dropdown menu showing 'Student Union', and 'Description*' with the text 'Lets go again!'. A red error message, 'Event already registered for this place and time!', is displayed below the 'Time*' field. A 'Create!' button is located at the bottom left of the form.

WYD Home New Event New RSO Join RSOs Profile Logout

Event

Title*

Another Fencing Party!

Date*

December 25 2019

Time*

6:00 PM

Event already registered for this place and time!

☒ Public

Rso

Fencing Club

Place*

Student Union

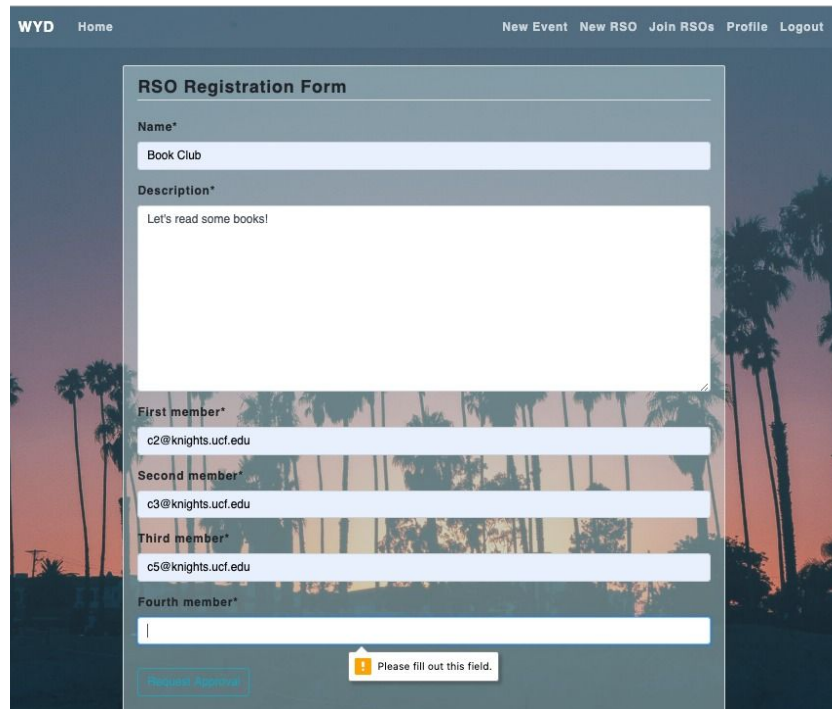
Description*

Lets go again!

Create!

Image #17: Event Creation With Overlapping Times Being Denied

RSO creation

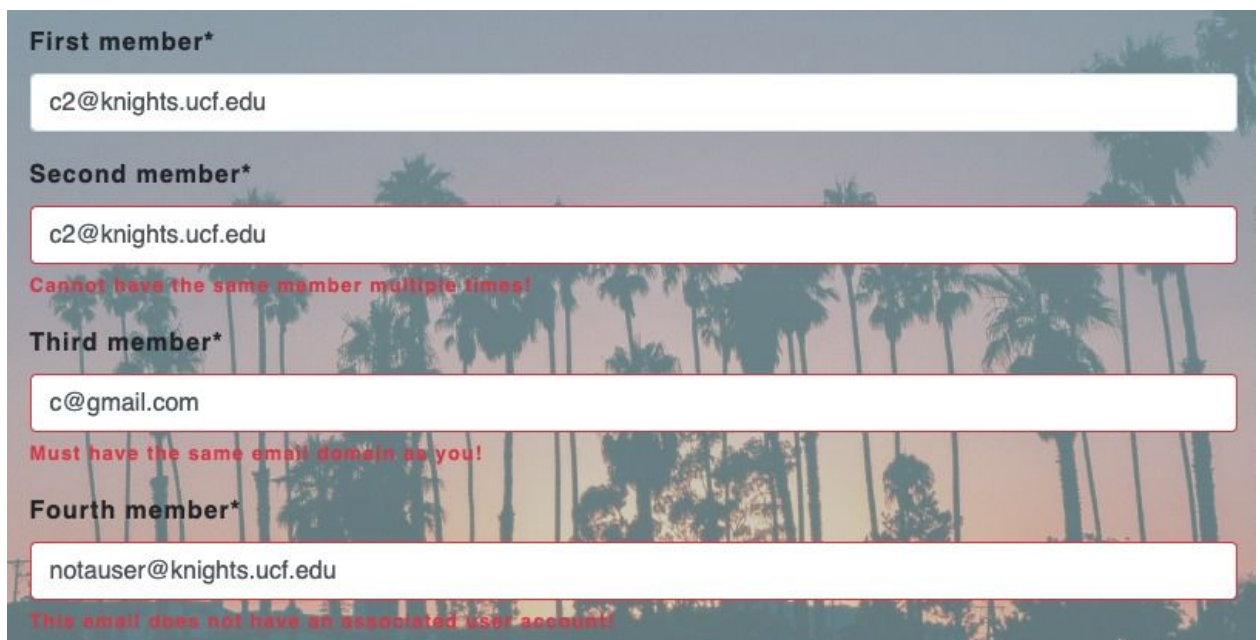


The screenshot shows the 'RSO Registration Form' on a website. The form has a dark blue header with navigation links: 'WYD', 'Home', 'New Event', 'New RSO', 'Join RSOs', 'Profile', and 'Logout'. The form itself is white with a dark blue border. It contains the following fields and values:

- Name***: Book Club
- Description***: Let's read some books!
- First member***: c2@knights.ucf.edu
- Second member***: c3@knights.ucf.edu
- Third member***: c5@knights.ucf.edu
- Fourth member***: (empty)

At the bottom of the form, there is a 'Request Approval' button and a yellow warning icon with the text 'Please fill out this field.' pointing to the empty 'Fourth member*' field.

Image #18: Create RSOs With Error States



This screenshot shows the same 'RSO Registration Form' but with error states for the member email fields. The 'First member*' field contains 'c2@knights.ucf.edu'. The 'Second member*' field contains 'c2@knights.ucf.edu' and has a red error message below it: 'Cannot have the same member multiple times!'. The 'Third member*' field contains 'c@gmail.com' and has a red error message below it: 'Must have the same email domain as you!'. The 'Fourth member*' field contains 'notausers@knights.ucf.edu' and has a red error message below it: 'This email does not have an associated user account!'. The background of the form is a blurred image of palm trees.

Image #19: Create RSOs With Error States

Advanced Features:

Some of our features include:

- Comment and Rating system

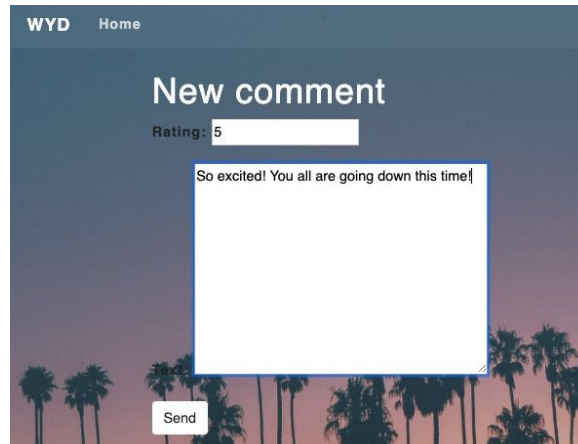


Image #20: Adding Comments

- Email distribution system for RSOs

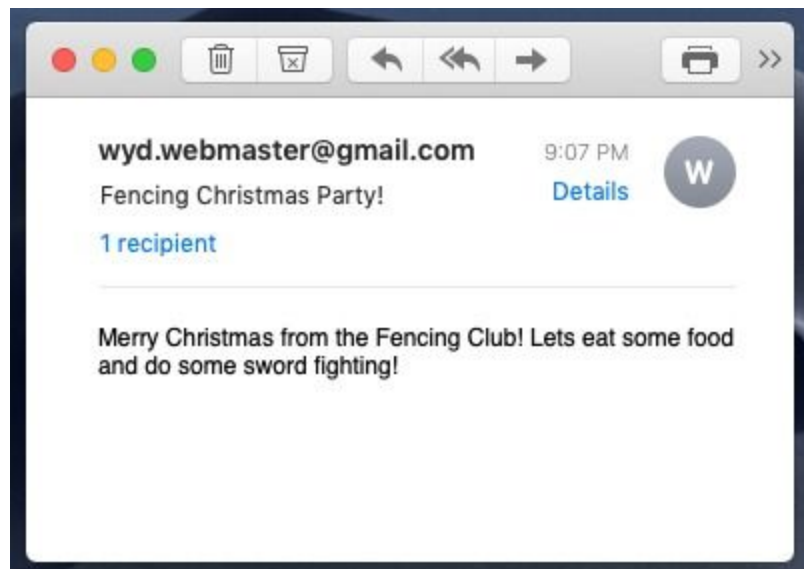


Image #21: Email Notifications For New Events Which They Have Permission To See

- University Profile View

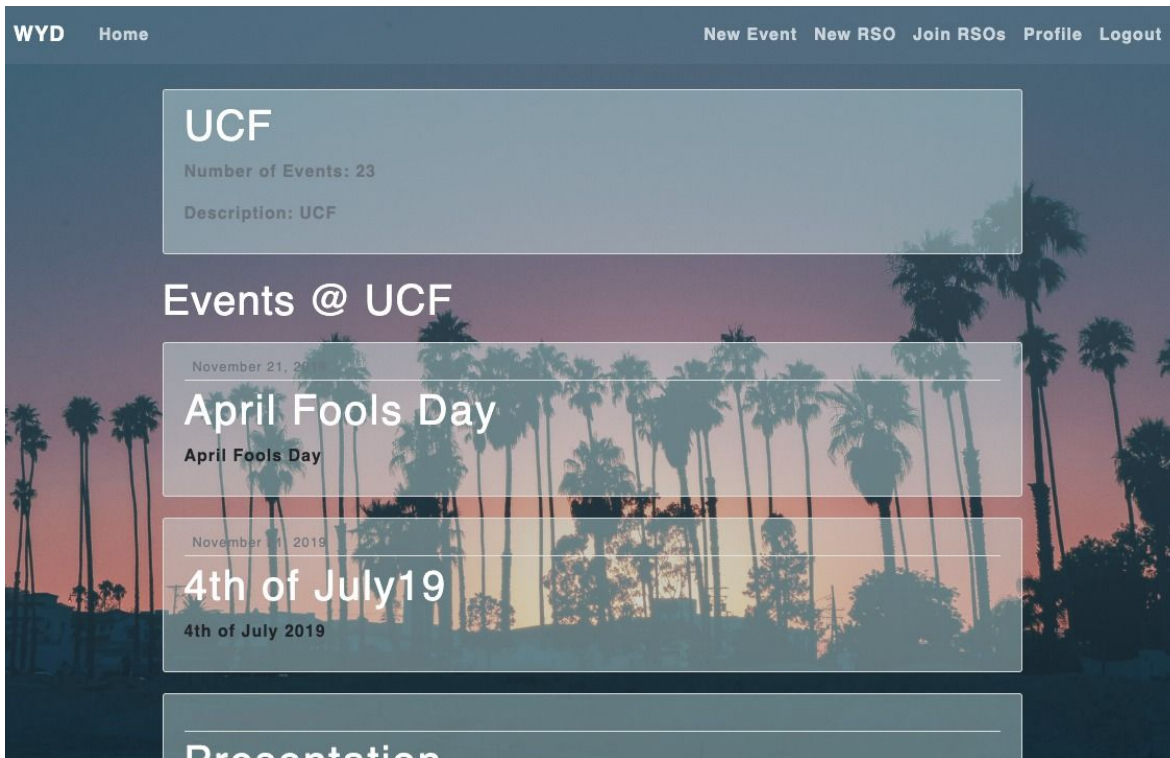


Image #22: University Event List View Page

CONCLUSIONS/OBSERVATIONS:

Overall this was a challenging project with many difficulties to overcome. Most of the team had never had any experience developing for a web application or interacting with a SQL database. Another shortcoming was the teams lack of experience with JavaScript and relied heavily on CSS, HTML and the Django framework to generate some of the functionality. In future versions, further use of JavaScript would greatly improve the site.

Using the Django framework greatly reduced the amount of low level work on the back end, and allowed us to focus on a higher level functionality for the project. One of the drawbacks of using the Django framework was the fact that some of the abstraction made it difficult to change smaller details. The team used Bootstrap for our CSS, and it greatly helped improve the overall quality of the site. The team used GitHub for source control and that greatly improved the teams ability to develop in a non-linear fashion.

The overall performance of our database was good. We used SQLite3 on our local development environments as our backend database. Although we never ran into any performance issues, we never had an extremely large dataset with multiple users running concurrently. To further test the overall quality of our end product, further volume and stress testing is required.

While the advanced features that were important to the team such as the commenting system were implemented, the team would like to further explore the use of Facebook and Google Maps APIs in future versions. While the team did not get a chance to implement either of those APIs, we did get to work with django's email support on the backend by sending out reminders to RSO members when a new event is posted.

While there are many improvements that could be made, the team is very proud of the final product given the amount of time we had. The django framework was extremely helpful and we will definitely keep it at the top of our list for future projects, and we are all excited to see where these new skills will take us in the future.