



# UCF

## SHOMI

Database Systems Project Report

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**COP 710 – Spring 2022**  
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## **PROJECT DESCRIPITON**

Shomi is a social event management website for colleges and their students. New users can register with their school and view the events available to them. Users can also join a student registered organization (RSO) and view their private events. If a user has admin privileges, they can create their own RSO and post events to the website. Super admin privileges allow a user to add a university to the website.

The website many ways to get involved with your community. Any user can post a comment and rating to an event they see. Shomi encourages interactivity between users.

### **Platform:**

Shomi was developed on Mac using MAMP to run a local server on my device. I designed the frontend to be best viewed on Chrome with a 16" MacBook Pro. I used Visual Studio Code as my IDE, terminal to access the MySQL database, and ARC to test the API.

### **Languages:**

The website is run on a MAMP server which uses MacOS, Apache, MySQL, and PHP. I wrote my frontend code with HTML, CSS, and JavaScript. The backend was created with PHP.

### **Simplifications:**

- Users do not need to "request" to join an RSO
- Only Admin can create an event
- Comments cannot be deleted or edited

## DBMS:

*High level view of MySQL Tables*

```
[mysql> SHOW TABLES;
+-----+
| Tables_in_shomi |
+-----+
| Comments        |
| Events          |
| Location         |
| RSO              |
| RSO_Members     |
| Universities    |
| Users           |
+-----+
7 rows in set (0.00 sec)
```

```
+-----+-----+-----+-----+-----+-----+-----+
| User_ID | Login | Email | Password | Uni_Name | Is_Admin | Is_SuperAdmin |
+-----+-----+-----+-----+-----+-----+-----+
| 1 | GavinB | gavbarb1@gmail.com | admin | UCF | 1 | 1 |
| 2 | JessiL | enephonix@gmail.com | pass | UF | 1 | 0 |
| 3 | RickyP | RickyP@gmail.com | 1234 | FSU | 0 | 0 |
| 4 | JeffreyL | crispyjeff@email.com | jj11 | UF | 1 | 0 |
| 5 | KyleS | steward@knights.ucf.edu | KS | UCF | 0 | 0 |
| 6 | HunterP | huph@gmail.com | hhpp | UF | 0 | 0 |
| 7 | JordanC | clutterJ@knight.ucf.edu | juice | UCF | 0 | 0 |
| 8 | KahnVu | kahnvu@knights.ucf.edu | prof | UCF | 0 | 0 |
| 9 | MariaB | mariab43@gmail.com | 12 | UF | 0 | 0 |
| 10 | LuisP | astrocide@gmail.com | rock | UF | 0 | 0 |
| 11 | AmyT | amyt99@yahoo.com | 99 | FSU | 0 | 0 |
| 12 | EthanL | ethanml321@hotmail.com | 321 | UF | 0 | 0 |
| 13 | RonaldB | airplanes@boeing.work | ap | UF | 0 | 0 |
| 14 | RobinG | bethg@yahoo.com | gold | UF | 0 | 0 |
| 15 | AidanD | aidandion@knights.ucf.edu | one | UCF | 0 | 0 |
| 16 | JakeG | 2001glacier@gmail.com | jagged | UF | 0 | 0 |
| 17 | MannyS | supermanny@yahoo.com | SM11 | UF | 0 | 0 |
| 18 | BrookeB | peacenlove@gmail.com | earth | UCF | 0 | 0 |
| 19 | JerryL | jerryli@email.com | kickbox | UCF | 0 | 0 |
| 20 | MimiS | mimifood@gmail.com | 246 | UF | 0 | 0 |
| 21 | DavieP | davey@gmail.com | 123 | UCF | 0 | 0 |
| 22 | LucashH | lucash@gmail.com | 123 | UCF | 0 | 0 |
| 23 | SamH | samh@gmail.com | 123 | UCF | 0 | 0 |
| 24 | DemoAccount | demo@gmail.com | 123 | UCF | 0 | 0 |
| 25 | WillsS | wills@gmail.com | 123 | UCF | 0 | 0 |
+-----+-----+-----+-----+-----+-----+-----+
25 rows in set (0.00 sec)
```

```

[mysql> SELECT * FROM Universities;
+-----+-----+-----+-----+-----+
| Uni_Name | User_ID | sCount | State | Description |
+-----+-----+-----+-----+-----+
| FSU      | 1       | 33500  | FL    | Florida State University |
| UCF      | 1       | 66183  | FL    | University of Central Florida |
| UF       | 1       | 39930  | FL    | University of Florida |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

[mysql> SELECT * FROM Comments;
+-----+-----+-----+-----+-----+
| Comment_ID | Event_Name | User_ID | Text | Rating |
+-----+-----+-----+-----+-----+
| 1 | Volleyball Tournament | 1 | Can't wait to watch this tournament! I love volleyball!! | 5 Stars |
| 2 | Italian Language Chat | 1 | I need to practice more... | 4 Stars |
| 3 | ArSA's Fundraiser Event | 2 | Argentina is beautiful <3 | 5 Stars |
| 4 | Phi Hoops | 2 | I will try to make it this time | 3 Stars |
| 5 | Big Red Bus - Donate Blood Today! | 2 | Its for a good cause! Do it! | 5 Stars |
| 6 | Volleyball Tournament | 2 | I wish I could play | 2 Stars |
| 7 | Big Red Bus - Donate Blood Today! | 3 | Make sure to drink lots of water before hand. | 5 Stars |
| 8 | Freestyle Painting at Jay Blanchard | 1 | Hopefully it doesn't rain again :( | 1 Star |
+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)

```

*Pictures of website GUI (Create RSO, Create Event, and home screen)*

Exit

Create RSO

RSO Name

Create

Exit

Create Event

Select Category

Public  
University  
Swimming Club  
Painting Club  
Math Club

Event Name

Time

Date

Phone Number

Email

Description

Create

[Log out](#)[Add University](#)[Create Event](#)[Join RSO](#)[Create RSO](#)

Matching Events Retrieved.

## Big Red Bus - Donate Blood Today!

Time: 11am-6pm   Date: April 12, 2022   Category: Public   Email: [BloodDrives@ucf.edu](mailto:BloodDrives@ucf.edu)   Phone #: N/A

Help us maintain a safe and ready blood supply for cancer patients, trauma patients or for when unexpected tragedies occur. The OneBlood bus will park on Memory Mall near the Veterans Memorial.

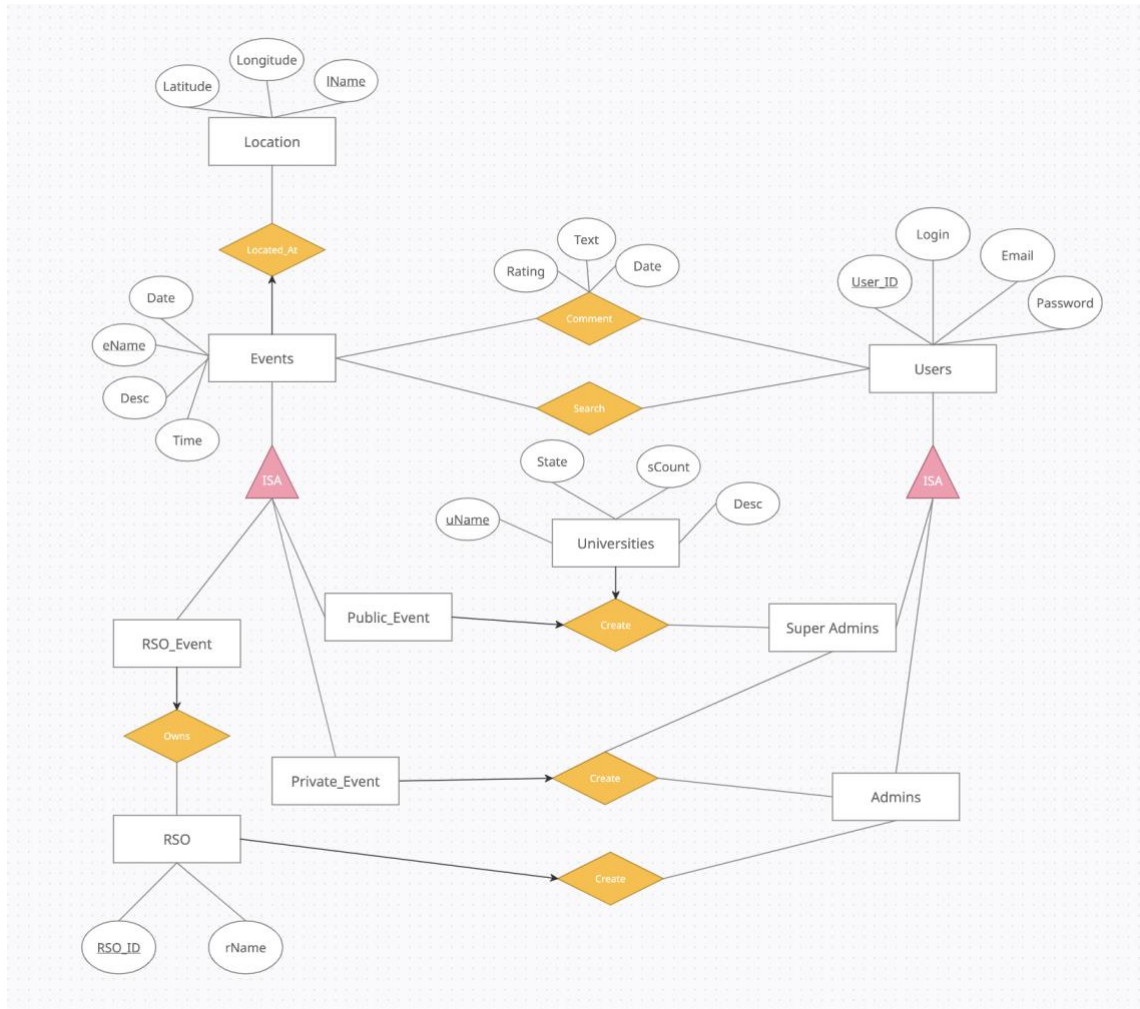
## Freestyle Painting at Jay Blanchard

Time: 1pm-4pm   Date: April 16, 2022   Category: Painting Club   Email: [paintclubucf@knights.ucf.edu](mailto:paintclubucf@knights.ucf.edu)

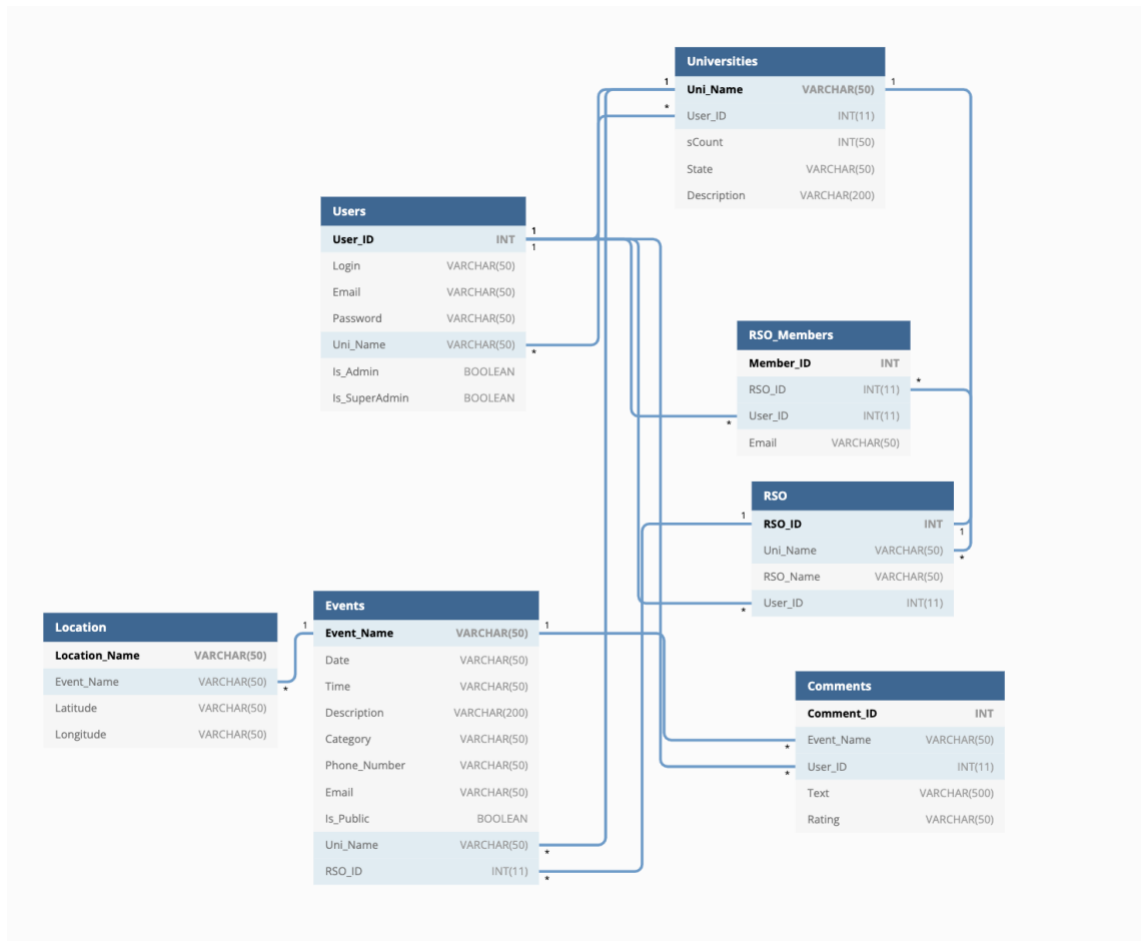
Phone #: [954-494-4048](tel:954-494-4048)

Come join us at Jay Blanchard Park to freestyle paint and socialize with your fellow artists. Bring snacks!

## ERD-Model:



## Relational Data Model:



## Sample Data:

*Users table*

User_ID	Login	Email	Password	Uni_Name	Is_Admin	Is_SuperAdmin
1	GavinB	<a href="mailto:Gavbarb1@gmail.com">Gavbarb1@gmail.com</a>	admin	UCF	1	1
2	JessiL	<a href="mailto:enephonix@gmail.com">enephonix@gmail.com</a>	pass	UF	1	0
3	RickyP	<a href="mailto:RickyP@gmail.com">RickyP@gmail.com</a>	1234	FSU	0	0
4	JeffreyL	<a href="mailto:crispyjeff@email.com">crispyjeff@email.com</a>	Jjll	UF	1	0
5	KyleS	<a href="mailto:steward@knights.ucf.edu">steward@knights.ucf.edu</a>	KS	UCF	0	0
6	HunterP	<a href="mailto:huph@gmail.com">huph@gmail.com</a>	Hhpp	UF	0	0
7	JordanC	<a href="mailto:clutterJ@knights.ucf.edu">clutterJ@knights.ucf.edu</a>	Juice	UCF	0	0



8	KahnVu	<a href="mailto:kahnvu@knights.ucf.edu">kahnvu@knights.ucf.edu</a>	Prof	UCF	0	0
9	MariaB	<a href="mailto:Mariab43@gmail.com">Mariab43@gmail.com</a>	12	UF	0	0
10	LuisP	<a href="mailto:astrocide@gmail.com">astrocide@gmail.com</a>	Rock	UF	0	0
11	AmyT	<a href="mailto:Amyt99@yahoo.com">Amyt99@yahoo.com</a>	99	FSU	0	0
12	EthanL	<a href="mailto:Ethanml321@hotmail.com">Ethanml321@hotmail.com</a>	321	UF	0	0
13	RonaldB	<a href="mailto:airplanes@boeing.work">airplanes@boeing.work</a>	Ap	UF	0	0
14	RobinG	<a href="mailto:bethg@yahoo.com">bethg@yahoo.com</a>	Gold	UF	0	0
15	AidanD	<a href="mailto:aidandion@knights.ucf.edu">aidandion@knights.ucf.edu</a>	One	UCF	0	0
16	JakeG	<a href="mailto:2001glacier@gmail.com">2001glacier@gmail.com</a>	Jagged	UF	0	0
17	MannyS	<a href="mailto:supermanny@gmail.com">supermanny@gmail.com</a>	SM11	UF	0	0
18	BrookeB	<a href="mailto:peacenlove@gmail.com">peacenlove@gmail.com</a>	Earth	UCF	0	0
19	JerryL	<a href="mailto:Jerryli@gmail.com">Jerryli@gmail.com</a>	Kickbox	UCF	0	0
20	MimiS	<a href="mailto:mimifood@gmail.com">mimifood@gmail.com</a>	246	UF	0	0

*Universities table*

Uni_Name	User_ID	sCount	State	Description
UCF	1	66183	FL	University of Central Florida
UF	1	39930	FL	University of Florida
FSU	1	33500	FL	Florida State University

*RSO table*

RSO_ID	Uni_Name	RSO_Name	User_ID
1	UCF	Swimming Club	1
2	UCF	Painting Club	1
3	UF	Alpha Epsilon Phi	2
4	UCF	Surfing Club	1
5	UCF	Math Club	1

## SQL Examples and Results:

### *Insert a new RSO*

```
[mysql> INSERT INTO RSO (Uni_Name, RSO_Name, User_ID) VALUES ('UF', 'Motorcycle Fans', 2);
Query OK, 1 row affected (0.01 sec)
```

```
[mysql> SELECT * FROM RSO;
```

RSO_ID	Uni_Name	RSO_Name	User_ID
1	UCF	Swimming Club	1
2	UCF	Painting Club	1
3	UCF	Math Club	1
4	UCF	Greek Life	1
5	UCF	Italian Culture Group	1
6	UCF	Surfing Club	1
8	UF	Argentine SA	2
9	UF	Alpha Epsilon Phi	2
10	UF	Black History Club	4
11	UCF	Sample RSO	1
12	UCF	Track and Field	1
13	UF	Motorcycle Fans	2

```
12 rows in set (0.00 sec)
```

```
[mysql> ]
```

### *Insert a new student to an existing RSO*

```
[mysql> INSERT INTO RSO_Members (RSO_ID, User_ID, Email) VALUES (3,7,'clutterJ@knights.ucf.edu');
Query OK, 1 row affected (0.01 sec)
```

```
[mysql> SELECT * FROM RSO_Members;
```

Member_ID	RSO_ID	User_ID	Email
1	1	1	gavbarb1@gmail.com
2	2	1	gavbarb1@gmail.com
3	3	1	gavbarb1@gmail.com
4	4	1	gavbarb1@gmail.com
5	5	1	gavbarb1@gmail.com
6	6	1	gavbarb1@gmail.com
7	7	2	enephonix@gmail.com
8	8	2	enephonix@gmail.com
9	9	2	enephonix@gmail.com
10	10	4	crispyjeff@email.com
11	8	4	crispyjeff@email.com
12	9	4	crispyjeff@email.com
13	1	5	steward@knights.ucf.edu
14	2	5	steward@knights.ucf.edu
15	3	5	steward@knights.ucf.edu
16	6	5	steward@knights.ucf.edu
17	1	23	samh@gmail.com
18	4	23	samh@gmail.com
19	5	23	samh@gmail.com
20	11	1	gavbarb1@gmail.com
21	10	2	enephonix@gmail.com
22	5	25	wills@gmail.com
23	4	25	wills@gmail.com
24	12	1	gavbarb1@gmail.com
25	3	7	clutterJ@knights.ucf.edu

```
25 rows in set (0.00 sec)
```

## Insert a comment

```
mysql> INSERT INTO Comments (Event_Name, User_ID, Text, Rating) VALUES ('UF Easter Celebration', 2, 'I love the egg hunts',
'5 Stars');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> SELECT * FROM Comments;
```

Comment_ID	Event_Name	User_ID	Text	Rating
1	Volleyball Tournament	1	Can't wait to watch this tournament! I love volleyball!!	5 Stars
2	Italian Language Chat	1	I need to practice more...	4 Stars
3	ArSA's Fundraiser Event	2	Argentina is beautiful <3	5 Stars
4	Phi Hoops	2	I will try to make it this time	3 Stars
5	Big Red Bus - Donate Blood Today!	2	Its for a good cause! Do it!	5 Stars
6	Volleyball Tournament	2	I wish I could play	2 Stars
7	Big Red Bus - Donate Blood Today!	3	Make sure to drink lots of water before hand.	5 Stars
8	Freestyle Painting at Jay Blanchard	1	Hopefully it doesn't rain again :(	1 Star
9	Fulbright Information Session	8	Don't miss the date students!	5 Stars
10	UF Easter Celebration	4	My second favorite holiday :)	5 Stars
11	Volleyball Tournament	4	Get ready to get spiked on!!	5 Stars
12	ArSA's Fundraiser Event	4	I want to visit Argentina one day	5 Stars
13	Fulbright Information Session	5	Will definitely be there!!!	5 Stars
14	Freestyle Painting at Jay Blanchard	5	I am somewhat of an artist myself ;)	4 Stars
15	Learn to Surf	5	Summer is almost here. It's a good time to learn I guess	4 Stars
16	Math Help Session	1	I need this	4 Stars
17	Fulbright Information Session	23	Nice Event	5 Stars
18	Sample Event	1	Sample Comment	1 Star
19	Big Red Bus - Donate Blood Today!	25	Test comment	3 Stars
20	Sample Event Demo	1	Comment!!	5 Stars
21	UF Easter Celebration	2	I love the egg hunts	5 Stars

21 rows in set (0.00 sec)

## Display Events

```
mysql> SELECT * FROM Events;
```

Event_Name	Date	Time	Description	Category	Phone_Number	Email	Is_Public	Uni_Name	RSG_ID
Alumni Tailgate	May 3rd, 2022	1pm-3pm	Bring your game face!	Greek Life	754-383-2293	alphaphi@knights.ucf.edu	0	NALL	4
ArSA's Fundraiser Event	Apr 18, 2022	12pm-4pm	We are raising money for a charity close to our hearts in Argentina.	Argentine SA	954-222-4930	N/A	0	NALL	8
Big Red Bus - Donate Blood Today!	April 12, 2022	11am-4pm	Help us maintain a safe and ready blood supply for cancer patients, trauma patients or for when unexpected tragedies occur. The OneBlood bus will park on Memory Mall near the Veterans Memorial.	Public	N/A	blooddrives@ucf.edu	1	NALL	NALL
Black Culture Appreciation	April 28, 2022	4pm	Join us to celebrate Black American culture	Black History Club	738-819-3925	bhstoryclub@gmail.com	0	NALL	18
Freestyle painting at Jay Blanchard	April 16, 2022	1pm-4pm	Come join us at Jay Blanchard Park to freestyle paint and socialize with your fellow artists. Bring snacks!	Painting Club	954-494-4446	paintclub@knights.ucf.edu	0	NALL	2
Fulbright Information Session	April 11, 2022	2pm	The Fulbright Scholarship Program fully funds students of all disciplines to live abroad for an academic year to conduct research, pursue graduate study, or teach English.	University	487-823-8881	OPA@ucf.edu	0	UCF	NALL
Italian Language Chat	April 11, 2022	11:30am	Come to the Italian language chat to improve your Italian communication skills and meet new friends.	Italian Culture Group	487-823-2472	Brian.Barone@ucf.edu	0	NALL	5
Learn to Surf	April 16, 2022	7am	One of our most popular trips is back for Spring 2022! Surfing is a classic Floridian adventure - come learn the basics with our Adventure Trip Leaders as your instructors.	Surfing Club	N/A	outdoor@ucf.edu	0	NALL	6
Math Help Session	April 19, 2022	11am-1pm	Bring any math related questions and our members will try to help you out.	Math Club	N/A	matchia@knights.ucf.edu	0	NALL	3
Phi Hoops	Apr 12, 2022	4pm-7pm	To fundraise money for our philanthropy, The Elizabeth Glaser Pediatric Aids Foundation	Alpha Epsilon Phi	N/A	AEPAP@gmail.com	0	NALL	9
Sample Event Demo	April 20th, 2022	12pm	This is a demo event.	University	9944944848	gabehall@gmail.com	0	UCF	NALL
UF Easter Celebration	Apr 18, 2022	8pm-10pm	To celebrate easter as a university.	University	342-539-3394	uf@ufl.mall.com	0	UF	NALL
Volleyball Tournament	Apr 16, 2022	4pm-7pm	This tournament is to raise money for philanthropies while having fun and hosting a volleyball tournament. We're looking for sponsors as well to help us get funds and food.	Public	N/A	ufpharm@ufl.edu	1	NALL	NALL

13 rows in set (0.00 sec)

## **Conclusion/Observations:**

All in all, this was an extremely in-depth and challenging project to take on alone. I was naïve and thought I could handle this by myself because I did not want the hassle of dealing with teammates. Although I am very proud of myself for making a fully functioning website with almost all the requirements met, I feel like it could have been a less stressful process with the help of some teammates. At the beginning of this semester, I nearly knew nothing of full stack web development and LAMP/MAMP stacks. Thankfully I quickly learned MySQL queries from this class and additional important web development skills from another class I am currently taking (COP4331). Now I can confidently say I am much more adept in HTML, CSS, JavaScript, and PHP.

Some desired features that I wanted to add but did not due to lack of time include event location, “requesting” to join an RSO or create an RSO, and editing/modifying comments. Some of these functionalities like geo-location and a requesting another user entail an unknown number of hours of work I simply could not sacrifice anymore for my other classes. Given additional time, I could have refined and added a lot more functionalities to Shomi, but I am happy with the final product.

During the development process, I considered deploying my files onto a LAMP stack on Digital Ocean but in the end, I decided not to because it felt unnecessary, and I would have to edit a lot of code. Running things locally using MAMP was more convenient and free. I ran into countless problems along the way but every time I solved them I felt a little more confident in my ability. This was one, if not the, biggest solo projects I’ve ever accomplished, and I have a newfound respect for full stack web developers. I am excited to see where my new skills will lead in the future. Thank you.