0.1 Database

0.1.1 The Users Class

The users table represents the users, who form groups, own pages, make posts, and attend events.

u_id This uniquely identifies the user

f_name The user's first name, to display on membership rosters

l_name The user's last name, to display on membership rosters

user_name This uniquely identifies the user, to display on pages and posts

phone The user's phone number, to send text-messages, and display on membership rosters Figure 1: UML class description

tbl_user		
u_id: INTEGER		
f_name: VARCHAR(32)		
l_name: VARCHAR(32)		
user_name: VARCHAR(128)		
email: VARCHAR(128)		
phone: CHAR(10)		
pass_word: CHAR(20)		
hash_str: CHAR(20)		
+< <pk>> pk_user_id()</pk>		
+< <unique>> unq_username()</unique>		
+< <unique>> unq_email()</unique>		

email The email to which notifications and invitations are sent

pass_word A 20 character array to hold the user's hashed pass word

hash_str A 20 character array for the hash used to encrypt the user's password

Figure 2: Sample contents of the users table

		.	L			L
u_id	f_name	l_name	user_name	email	phone	
1 2 3 4 5 6 7 8 9 10	Tyrone Sofia Nelson Guy Clayton Nelson Darren Poplar Jami Dollie	Insley Quarterman Triche Volker Sherk Bamber Henne Poplar Suazo Ackerley	insl3318 quar5690 tric9902 volk4622 sher1676 bamb6464 henn5147 popl9007 suaz9038 acke7776	insl3318@vandals.uidaho.edu quar5690@vandals.uidaho.edu tric9902@uidaho.edu volk4622@uidaho.edu sher1676@uidaho.edu bamb6464@uidaho.edu henn5147@uidaho.edu popl9007@uidaho.edu suaz9038@uidaho.edu acke7776@yahoo.com	2083014065 2088854065 2088825381 2088826147 2088829891 2088826156 2088822405 2088822648 2088835727	
+					r 	Γ.

0.1.2 The Groups Class

The groups table represents the groups, that have membership rosters, own pages, host forums, and host events.

g_id This uniquely identifies the group

g_name The name of the group

acronym The group's acronym

category The group's category: academic, honorary, community_service, civic_action, cultural, ethnic, graduate, professional, greek_life, career, recreational, sport, special_interest, spiritual, or religious

email The email users outside the group use to get in contact with the group

Figure 3: UML class description

tbl_group			
d: SMALLINT			
ame: VARCHAR(128)			
cronym: VARCHAR(10)			
ategory: VARCHAR(20)			
mail: VARCHAR(128)			
<pk>> pk_group()</pk>			
<check>> chk grp cat()</check>			

Figure 4: Sample contents of the groups table

1		L .	
g_id g_name	acronym	category	email
1 Ambitious Women of Excellence, Str 2 Ecology and Conservation Biology C 3 Tau Beta Pi 4 Lutheran Campus Ministry		special_interest academic honorary religious	awesum_ui@yahoo.com nrecb-club@uidaho.edu awixom@vandals.uidaho.edu lcm@ccc.org

0.1.3 The Membership Associative Table

Each row in the membership table represents a member, a group they are in, and the status of the member.

```
u.id The ID of the userg.id The ID of the group
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status The status of the user within the group, limited to common statuses such as, member, officer, and sponsor. The database-wide roles (ASUI, ITS) will be implemented through GRANT statements.

The ID numbers where used to speed the query transactions, but through the use of the appropriate query, it's possible to get more human-readable results. A straight transliteration of the membership table might include the user-name, the group name, and the membership status. I would need to use information from three tables: the user table, the group table, and the membership table. Then I would make sure I only got the entries where the u_ids matched, and the g_ids matched. SELECT u_user_name, g_g_name, m.status FROM gus.tbl_membership m INNER JOIN gus.tbl_group g INNER JOIN gus.tbl_user u ON g_g_id=m.g_id AND u.u_id=m.u_id;

Figure 5: UML class description

tbl_membership
u_id: INTEGER
g_id: SMALLINT
status: VARCHAR(10)
+< <pk>> pk_membership(u_id,g_id)</pk>
+< <fk>> fk_mem_user()</fk>
+< <fk>> fk_mem_group()</fk>

Figure 6: Sample contents of the membership table

1 1 member 1 2 officer 2 1 officer 2 2 member 3 1 member 4 1 sponsor 5 2 sponsor 7 3 sponsor 8 3 officer	u_id	+ g_id	status
	1 2 2 3 4 4 5 7	2 1 2 1 1 2	officer officer member member sponsor sponsor sponsor

Figure 7: Human-readable version of the membership table

user_name g_name	status
insl3318 Ambitious Women of Excel quar5690 Ambitious Women of Excel tric9902 Ambitious Women of Excel	Strength, Unity, and Motivation member Strength, Unity, and Motivation officer Strength, Unity, and Motivation member Strength, Unity, and Motivation sponsor gy Club officer gy Club member