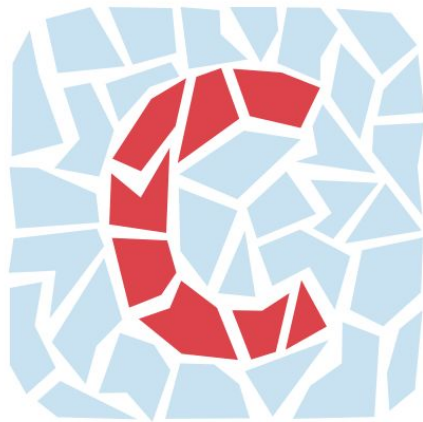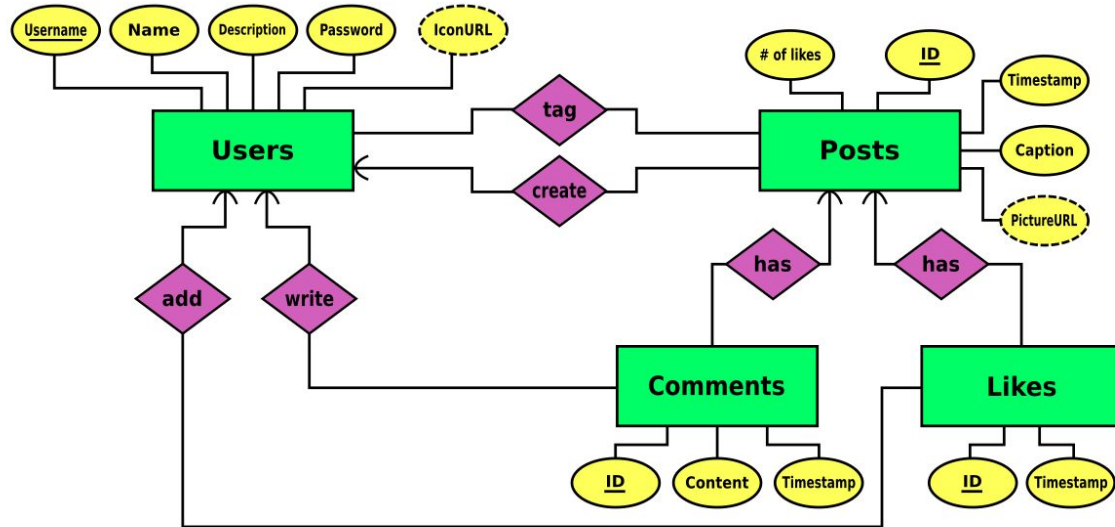# Cosaic

Team #38

Project Data Model & DB Design Document

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CS 157A Team #38 ER Diagram

Description:

The Users entity has 5 attributes that define it which are username (key), name, password, description, and iconURL. Note that the iconURL is a derived attribute that is actually calculated by using the primary key (which means it's not necessary to store in the database). Users then has a many to one "create" relationship with posts in a sense that one user can create many posts, but a post cannot be created by many users. Users also has a many to many "tag" relationships to posts since we know that users can be tagged in multiple posts, and a post can tag multiple users
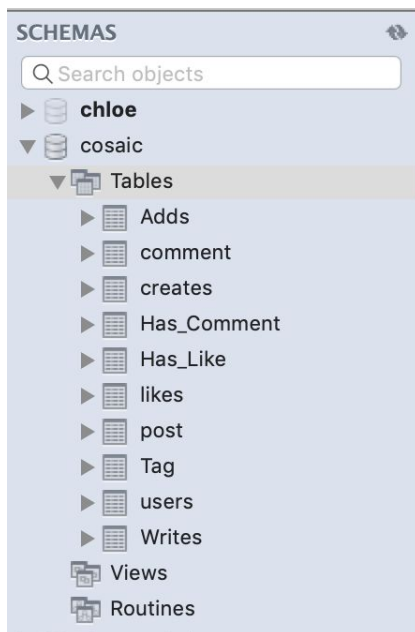
Each post has the following properties: number of likes, post id, timestamp, a caption, and a pictureURL (which is derived from the post id). In addition to the relationship with users mentioned earlier, the posts entity also has a relationship with the comments/likes entities. A single post can have multiple comments/likes. But the same comment/like cannot be on multiple posts.

The comments entity has a comment id, content, and a timestamp. It then has a relationship with the users entity so we can keep track of who wrote what comment on each post.

The likes entity has a like id and timestamp. Just like the comments entity, it has a relationship with the users entity so we can keep track of who liked each post.

Schemas:

Users (<u>Username</u>, Name, Description, Password)

Posts (<u>ID</u>, Number of likes, Timestamp, Caption)

Likes (<u>ID</u>, Timestamp)

Comments (<u>ID</u>, Content, Timestamp)

Tag (<u>Username</u>, <u>PostID</u>)

Creates (<u>Username, PostID</u>)

Has_Like (<u>LikeID</u>, <u>PostID</u>)

Has_Comment (<u>CommentID</u>, <u>PostID</u>)

Adds (<u>Username, LikeID</u>)

Writes (<u>Username</u>, <u>CommentID</u>)

Tables-Entities

Users

username	name	description	password
Alexander	Alexander	"This is my dog and cat life"	f02f56bed0b6b1cc17bc641ccdd63849
Dogandcat	Ethan	NULL	8ea3b58eb88f49009e0ebab340d5ba1b
EmilyJosh	Emily	"SJSU, crawfish addict"	08c6a51dde006e64aed953b94fd68f0c
Greenface	Liam	NULL	ee14e0fecf8b9a6842cc829e8e4f1a2f
Haileywu	Hailey	NULL	73a90acaae2b1ccc0e969709665bc62f
Harrypotter	Emma	NULL	e3c8814d54c5bb4df5c17f7106c5d63e
Imsamoyed	Alex	"Hi, lets be friends"	2a49552c35e71e8e710b017e4b96fc31
johnisme	John	NULL	7618c4886a806e4029f89ea1fc117665
Kellywang	Kelly	"Fresh flower in town. Contact 123 456 7890"	2998873f8f1b730d95ca1d7b0a66c854
Mickey	Mia	NULL	8d8dd15259106cde5c6f603d4eca03c5
Mike	Mike	"I love chamomile tea"	de7732e4442b3985b07618e804a921cd
Noah78	Noah		de5949721e6352f01dfef317c3e898a8
Peony87	Alice	"Fashion, Travel, Lifestyle"	6444a4800e087071b3cb789f21204c3d
Rosie	Alice	"Travel vloger"	05d95cc4645b6c9bc145f07e5922dc39
Sanfrankisco	Kris	"We are food vlogers"	5501305c623016c4a61ebe8bf64d6719
NULL	NULL		NULL

Comments

id	content	create_at
1	"This is nice"	2019-03-01 11:57:43
2	" How are you?"	2019-04-03 10:45:19
3	"That pizza! nice"	2019-04-07 11:26:23
4	" Great pic!"	2019-04-10 04:25:12
5	jacket	2019-04-26 11:34:39
6	"yummy!"	2019-05-15 09:15:19
7	"have funs"	2019-05-29 20:57:34
8	cool	2019-05-30 05:23:56
9	"that food is nom nom"	2019-06-15 11:57:13
10	"Hey, is it the restaurant on Story rd?"	2019-07-10 14:34:16
11	"where is this place?"	0000-00-00 00:00:00
12	"address plzzzz"	0000-00-00 00:00:00
13	"yummy !!"	2019-09-27 10:14:35
14	"that food is nom nom"	2019-11-10 12:46:15
15	"nice jacket!"	2019-11-10 12:46:15
	NULL	NULL

Likes

id	create_at
1	2019-01-01 00:00:01
2	2019-04-03 10:45:19
3	2019-04-07 11:26:23
4	2019-04-10 04:25:12
5	2019-04-26 11:34:39
6	2019-05-15 09:15:19
7	2019-05-15 23:15:34
8	2019-05-29 20:57:34
9	2019-05-30 05:23:56
10	2019-06-15 11:57:13
11	2019-07-10 14:34:16
12	0000-00-00 00:00:00
13	0000-00-00 00:00:00
14	2019-09-27 10:14:35
15	2019-11-10 12:46:15
	NULL

Posts

id	numlikes	create_at	caption
1	3	2019-02-01 11:57:43	NULL
2	3	2019-03-03 10:42:19	NULL
3	6	2019-02-01 11:57:43	hi
4	11	2019-03-07 11:02:23	NULL
5	23	2019-04-26 05:06:39	this is great day
6	55	2019-04-01 11:57:43	NULL
7	66	2019-05-01 11:57:43	hi New York
8	1	2019-06-01 02:57:43	NULL
9	4	2019-07-01 01:57:43	:)
10	NULL	2019-08-01 03:12:43	NULL
11	NULL	2019-09-01 04:34:34	starbuck for a day
12	23	2019-09-01 11:12:34	NULL
13	NULL	2019-09-01 08:03:25	mocha mocha
14	23	2019-10-01 11:57:35	NULL
15	NULL	2019-10-01 07:57:43	10 miles hikee! Great
	NULL	NULL	NULL

Tables-Relationships

Create

username	post... ^
▶ Rosie	1
Greenface	2
Mike	3
Mickey	4
Kellywang	5
Greenface	6
Mike	7
Harrypotter	8
Haileywu	9
Harrypotter	10
Noah78	11
Johnisme	12
Sanfrankisco	13
Peony87	14
Mike	15

creates	

Tag

post_id	comment... ^
▶ 4	1
2	2
6	3
4	4
3	5
4	6
7	7
6	8
6	9
2	10
4	11
12	12
15	13
3	14
6	15

has_comments	

Has_Comments

post_id	comment...
4	1
2	2
6	3
4	4
3	5
4	6
7	7
6	8
6	9
2	10
4	11
12	12
15	13
3	14
6	15

has_comments

Has_Likes

LikeID	PostID
1	8
2	4
3	13
4	5
5	5
6	9
7	27
8	6
9	4
10	9
11	31
12	8
13	1
14	3
15	7

has_like 1 ✕

Adds

username	like_id
Harrypotter	1
Rosie	2
Greenface	3
Mike	4
Noah78	5
Rosie	6
Harrypotter	7
Mike	8
Sanfrankisco	9
Rosie	10
Johnisme	11
Noah78	12
Haileywu	13
Kellywang	14
Greenface	15

adds

Writes

username	comment...
Greenface	1
Harrypotter	2
Kellywang	3
johnisme	4
Mike	5
Mickey	6
Kellywang	7
Rosie	8
Greenface	9
Mike	10
Harrypotter	11
Alexander	12
Dogandcat	13
Dogandcat	14
Greenface	15

writes