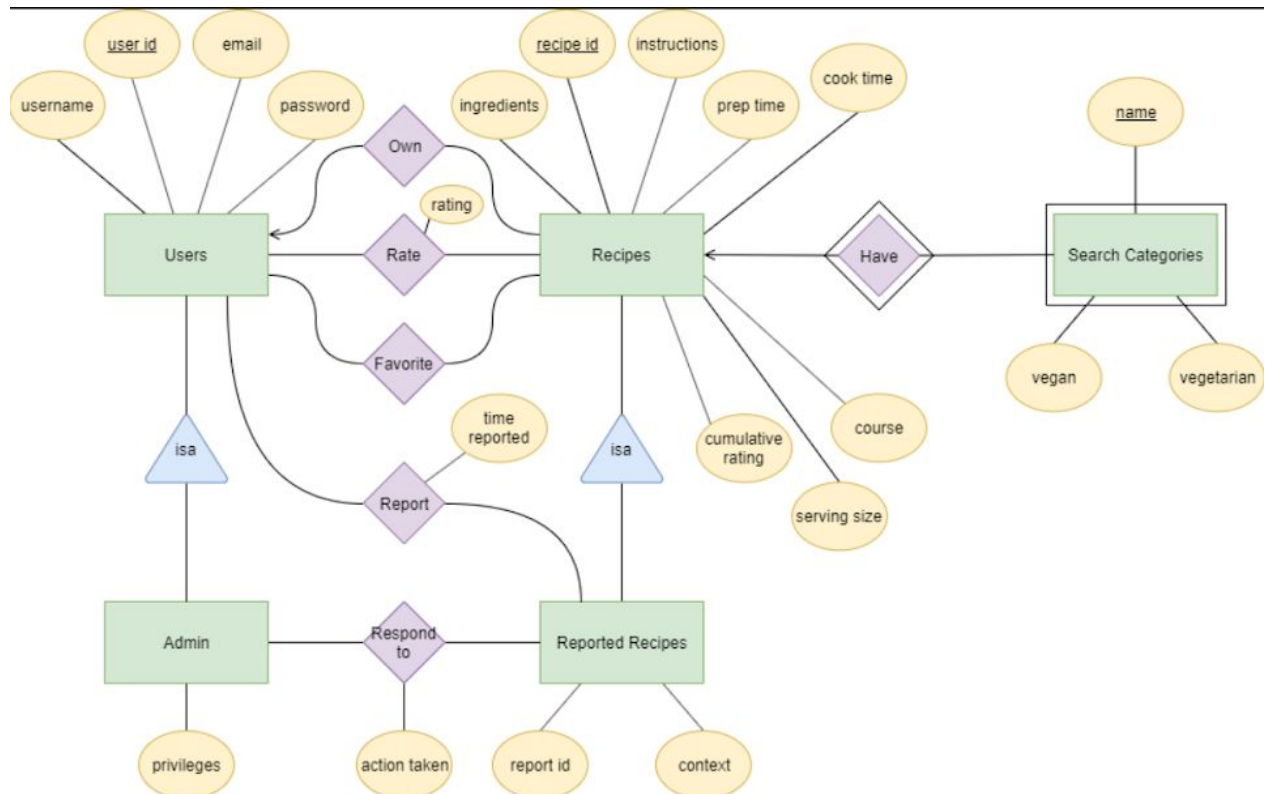


Project Data Model & Database Design Document

Team 36

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ER Model:



Explanation:

Entity Sets:

- Users
 - Represents visitors to Recipedia that have created their own user accounts.
 - Differentiated by their user id. Attributes include username, password, and email.
 - Schema: Users(user id, username, password, email)

1

SELECT * FROM Users

username	userID	email	password
user0	0	user0@gmail.com	randomPass1
user1	1	user1@gmail.com	randomPass1
user2	2	user2@gmail.com	randomPass1
user3	3	user3@gmail.com	randomPass1
user4	4	user4@gmail.com	randomPass1
user5	5	user5@gmail.com	randomPass1
user6	6	user6@gmail.com	randomPass1
user7	7	user7@gmail.com	randomPass1
user8	8	user8@gmail.com	randomPass1
user9	9	user9@gmail.com	randomPass1
user10	10	user10@gmail.com	randomPass1
user11	11	user11@gmail.com	randomPass1
user12	12	user12@gmail.com	randomPass1
user13	13	user13@gmail.com	randomPass1
user14	14	user14@gmail.com	randomPass1

- Admin

- A subclass of Users. Represents users who have administrative privileges.
- Primarily responsible for handling Reported Recipes by allowing or striking them.
- Schema: Admin(user id, privileges)

userid	privileges
0	Remove, Edit, Suspend
1	Remove, Edit, Suspend
2	Remove, Edit, Suspend
3	Remove, Edit
4	Remove, Edit
5	Remove, Edit
6	Suspend
7	Suspend
8	Remove, Edit
9	Remove, Edit, Suspend
10	Remove, Edit, Suspend
11	Remove, Edit
12	Remove, Edit, Suspend
13	Remove, Edit
14	Remove

- Recipes

- Represents recipes that have been uploaded to Recipedia.
- Differentiated by their recipe_id. Attributes include ingredients, instructions, serving size, prep time, cook time, course (main, side, dessert, etc), and cumulative rating.
- Schema: Recipes(recipe_id, ingredients, instructions, serving size, prep time, cook time, course, rating)

recipeID	ingredient	author	instruction	prepTime	cookTime	course	servingSize
01	3/4 cup packed brown sugar 1/2 cup butter, softened...		3/4 cup packed brown sugar 1/2 cup butter, soft...	30m	15m		12
02	1 tablespoon salt1 teaspoon caraway seeds (optiona...		Preheat oven to 450 degrees F (230 degrees C). Mi...	30m	15m		6
03	1 tomato, seeded and diced 1/2 red bell pepper, se...		Combine tomato, red bell pepper, onion, and lime j...	30m	15m		4
04	3 slices bacon cooking spray 2 eggs salt and grou...		Place bacon slices in a large skillet and cook ove...	5m	16m		1
05	2 (10 ounce) packages frozen brussel sprouts 6oun...		Place Brussels sprouts in a 2 quart microwave safe...	5m	10m		5
06	2 teaspoons olive oil 3/4 pound sugar snap peas, ...		Heat oil in a large skillet over medium heat. Add ...	6m	4m		4
07	1 teaspoon salt1/2 teaspoon seasoned salt1/4 teasp...		Place green beans and carrots in 1 inch of boiling...	20m	15m		6
08	1 tablespoon butter 3 tablespoons olive oil1 medi...		In a large skillet over medium heat, melt butter w...	10m	15m		5
09	1/2 pound sliced bacon 1/4 cup butter2/3 cup pine...		Place bacon in a large, deep skillet. Cook over me...	20m	25m		8
10	3 cups dried pinto beans16 1/2 cups water, divided...		Place beans in a slow cooker and cover with 8 cups...	10m	8h5m		18

recipeID	ingredient	author	instruction	prepTime	cookTime	course	servingSize
	seasoned salt1/4 teasp...		carrots in 1 inch of boiling...				
08	1 tablespoon butter 3 tablespoons olive oil1 medi...		In a large skillet over medium heat, melt butter w...	10m	15m		5
09	1/2 pound sliced bacon 1/4 cup butter2/3 cup pine...		Place bacon in a large, deep skillet. Cook over me...	20m	25m		8
10	3 cups dried pinto beans16 1/2 cups water, divided...		Place beans in a slow cooker and cover with 8 cups...	10m	8h5m		18
11	1 (3 pound) beef chuck roast, cut into 6 to 8 chun...		Season beef chunks with salt and pepper on all sid...	25m	8h4m		8
12	1 pound shredded, cooked chicken 1 (15 ounce) ...		Place chicken, tomatoes, enchilada sauce, onion, g...	30m	8h		8
13	2 skinless, boneless chicken breasts, diced 1 ...		Step 1 Season chicken with seasoned salt and pepp...	20m	30m		4
14	¼ cup butter 1 large onion, chopped 3 russ...		Step 1 Melt butter in a large pot over medium hea...	15	20		6
15	4 cups chicken broth2 serrano peppers, chopped (op...		Preheat the oven to 400 degrees F (200 degrees C)....	20m	1h55m		8

- Reported Recipes

- A subclass of Recipes. Represents recipes that have some sort of inappropriate content in them, and have been flagged for review by an Admin.
- The time of reporting is documented, as well as the context of the report, detailing why the recipe was reported in the first place.

- Schema: ReportedRecipes(recipe id, report id, context)

reportID	context	recipeID
1	context1	1
2	context2	2
3	context3	3
4	context4	4
5	context5	5
6	context6	6
7	context7	7
8	context8	8
9	context9	9
10	context10	10
11	context11	11
12	context12	12
13	context13	13
14	context14	14
15	context15	15

- Search Categories
 - Represents search filters that can be used to narrow down Recipes.
 - Differentiated by their name, but inherits recipe id from Recipes as a primary key.
 - Could potentially be expanded to include additional parameters (keto, paleo, etc)
 - Schema: SearchCategories(recipe id, name, vegan, vegetarian)

```
mysql> select * from SearchCategories;
```

recipe_id	name	vegan	vegetarian
0	Spaghetti and Meatballs	0	0
1	Chocolate Cake	0	0
2	Vegan Chocolate Cake	1	1
3	Ratatouille	0	1
4	Margherita Pizza	0	1
5	Beef Stew	0	0
6	Chow Mein	0	0
7	Beef Tacos	0	0
8	Stir Fry	0	0
9	Ice Cream	0	1
10	Chili con Carne	0	0
11	Eggplant Parmesan	0	1
12	Colorado Omelette	0	0
13	Chicago Dog	0	0
14	Apple Pie	0	1

Relationships:

- Own
 - Users may create new Recipes. Once created, they can be managed by their respective Users. Each Recipe can be owned by one User.
 - Schema: Own(user id, recipe id)

userID	recipeID
11	1
11	5
11	14
12	2
12	9
13	3
14	4
15	12
16	8
17	7
17	13
21	6
22	15
23	10
24	11

- Rate
 - Users can rate Recipes. Cumulative rating is stored as an attribute of Recipes.
 - Schema: Rate(user id, recipe id, rating)

userID	rating	recipeID
10	2	1
11	3	1
14	4	3
22	2	3
14	2	5
17	4	5
17	2	8
17	5	9
19	4	1
20	3	1
11	2	13
11	4	13
19	5	14
19	2	9
20	1	1

- Favorite
 - Users can pick favorite Recipes to save for later.

- Schema: Favorite(user id, recipe id)

userID	recipeID
10	1
11	2
12	3
13	4
14	5
15	6
16	7
17	8
18	9
19	10
20	11
21	12
22	13
23	14
24	15

- Report
 - Users can report Recipes if they find they have inappropriate content in them.
 - Documents the time the report was submitted
 - Schema: Report(user id, recipe id, time reported)

reportTime	userID	recipeID
2019-10-15 06:16:08	10	1
2019-09-03 04:16:06	11	2
2019-08-07 05:22:33	12	3
2019-08-01 04:21:11	13	4
2019-08-14 08:11:29	14	5
2019-10-04 15:22:25	15	6
2019-06-03 16:33:43	16	7
2019-06-04 20:35:35	17	8
2019-10-01 14:29:29	18	9
2019-05-09 12:22:32	19	10
2019-10-03 19:25:00	20	11
2019-08-21 21:41:00	21	12
2019-10-06 05:28:28	22	13
2019-07-09 11:28:39	23	14
2019-09-30 20:55:41	24	15

- Respond to
 - Admin can respond to Reported Recipes to review them and decide whether they should be left alone or taken down.
 - Schema: RespondTo(user id, recipe id, action taken)

```
1 SELECT * FROM respondedTo
```

reportid	userID	actionTaken
0	6	ignored
1	6	deleted
2	6	edited
3	6	ignored
4	6	ignored
5	13	deleted
9	13	ignored
12	13	deleted
6	6	edited
7	6	edited
15	10	ignored
8	6	ignored
16	10	ignored
17	10	deleted
10	6	deleted

- Have

- Recipes have Search Categories. Visitors to Recipedia can search the database for particular Recipes, and can narrow their search by providing Search Categories that match those that are attached to existing Recipes.
- Because this is a supporting relationship for the weak entity set Search Categories, this relationship does not have a table, and is represented in the Search Categories table.