Stop staring at the fridge! 👀👀

Recipes found using a console app can be saved to a database.

```
Would you like to save this recipe? Please type yes/no, or press 'q' to quit the current search: no
Recipe: Strawberry Shake,
('http://www.marthastewart.com/319109/strawberry-shake',)
['1 pint strawberry ice cream', '1 cup frozen strawberries (4 ounces)', '1 cup milk']

Would you like to save this recipe? Please type yes/no, or press 'q' to quit the current search: yes


        -------------------------------------------------
        Recipe 'Strawberry Shake' saved.
        -------------------------------------------------
```
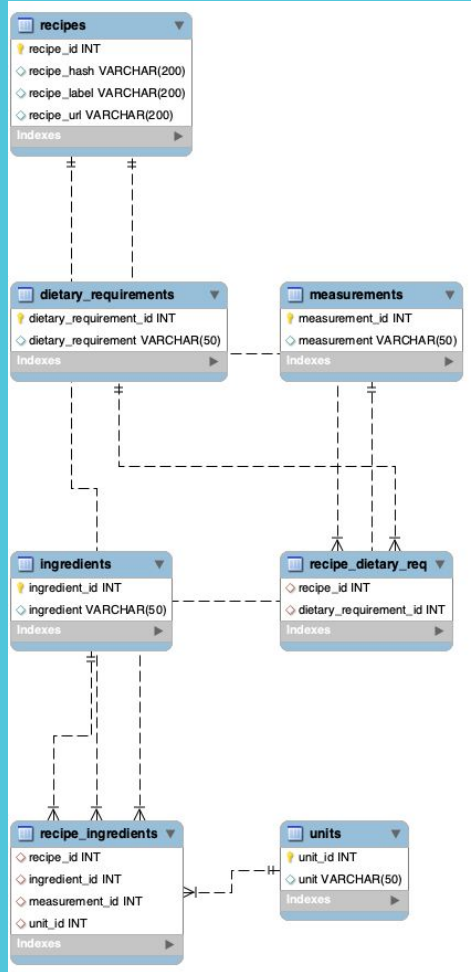
recipe_id	recipe_label	ingredient	measurement	unit	recipe_url
176	Strawberry Shake	strawberry ice cream	1.0	pint	http://www.marthastewart.com/319109/strawberry-shake
176	Strawberry Shake	frozen strawberries	4.0	ounce	http://www.marthastewart.com/319109/strawberry-shake
176	Strawberry Shake	milk	1.0	cup	http://www.marthastewart.com/319109/strawberry-shake

Database diagram

Designed the database to:

- Maximise room for growth.

- Allow recipes to be searched for using different criteria such as dietary requirements or number of ingredients.

Recipes

recipe_id	recipe_hash	recipe_label	recipe_url
161	recipe_466d27da4ab9b155779893f32c73d65f	Chocolate Covered Potato Chips Recipe	http://www.seriouseats.com/recipes/2012/10/chocolate-covered-potato-chips-recipe.html
162	recipe_672c9e7e3fbc6240477d99152ba8f6b3	Burnt-Scallion Fish	http://www.saveur.com/article/Recipes/Burnt-Scallion-Fish
163	recipe_101712c104270b058b3759ae341c97e7	Banana smoothie	https://www.bbcgoodfood.com/recipes/afternoon-pick-me-smoothie
164	recipe_06e4f332d9078da7d173d9ecfe9e9e4a	Top Banana	https://www.epicurious.com/recipes/food/views/top-banana-lager-beer-cocktail
165	recipe_84a07bd0f7ef44799660529f2db58ad3	Grilled Cheesecake	http://www.seriouseats.com/recipes/2011/10/grilled-cheesecake-cakespy-book-dessert-recipe.html
166	recipe_e4925b2e3e369fe3ce33e5604466a1be	Beetroot Kichadi	http://honestcooking.com/beetroot-kichadi/
167	recipe_2460835200a15c7bd0a6cac992c75ab8	Beetroot Chapatti	https://food52.com/recipes/83651-beetroot-chapatti-recipe
168	recipe_6d4439a7df0e7bf009cc761ad6b51012	Salmon Rillettes/Salmon Spread	http://www.davidlebovitz.com/2007/11/salmon-rillette/
169	recipe_7eb3edfc916ebf0e4b028c8e5c04b81a	Roast sirloin of beef	http://www.bbcgoodfood.com/recipes/2558/roast-sirloin-of-beef
170	recipe_0f3a359371750f372c7ac3c1459751d9	Beef Tea	https://www.epicurious.com/recipes/food/views/beef-tea-395253
171	recipe_b6d5d8f93c9a9aa5619ce44789739c71	Sweet Potato Smoothie	https://food52.com/recipes/55110-sweet-potato-smoothie
172	recipe_7c5a5ced83523b4dc49adbc78471cc38	Rainbow Ice Cream Pops Recipe	http://www.seriouseats.com/recipes/2012/07/rainbow-ice-cream-pops-recipe.html
174	recipe_251f2a98b66f844fdfd140be0796663c	Coconut Cake	http://www.marthastewart.com/2011/03/coconut-cake-recipe.html
175	recipe_8b76b244c3ee93def04602e6085d5a92	Macerated strawberries	https://food52.com/recipes/9687-macerated-strawberries
176	recipe_48a7b6b6ca45673d14bc25ebc8f12c71	Strawberry Shake	http://www.marthastewart.com/319109/strawberry-shake

Units and measurements

unit_id	unit
387	<unit>
382	bunch
398	cup
409	gram
426	kilogram
385	milliliter
416	None
380	ounce
451	pint
447	quart
395	slice
383	tablespoon
388	teaspoon
393	wedge

measurement_id	measurement
446	0.0
454	0.25
442	0.5
420	0.75
418	1.0
456	1.25
431	1.5
445	100.0
474	14.0
414	16.0
412	2.0
429	2.5
461	3.0

Recipe ingredients ids

recipe_id	ingredient_id	measurement_...	unit_id
161	647	410	380
161	648	411	380
162	649	412	382
162	650	413	383
162	651	414	380
163	652	415	385
163	653	412	383
163	654	417	387
163	655	418	388
163	656	418	387
164	657	420	380
164	656	420	380
164	659	413	380
164	660	418	393
165	650	418	383
165	662	412	395
165	663	418	395
166	664	418	387

Ingredients

ingredient_id	ingredient
653	almond butter
702	Almond Milk
712	baking powder
656	banana
717	basil
693	beef
695	beef consommé
664	beetroot
650	butter
663	cheesecake
671	chili
689	chives
647	chocolate

Dietary requirement ids

recipe_id	dietary_requirement_id
161	48
161	49
162	50
163	48
164	48
164	49
166	54
166	55
167	54
167	55
168	58
169	58
170	58
171	48
174	62
175	48
175	62
176	48
176	55

Dietary requirements

dietary_requirement...	dietary_requirement
58	peanut-free
55	sesame-free
54	shellfish-free
50	soy-free
48	vegan
49	vegetarian
62	wheat-free

Foreign keys

Primary keys

Join tables in logical way

```
CREATE VIEW banana_smoothie AS
SELECT recipe_ingredients.recipe_id,
recipes.recipe_label, recipe_ingredients.ingredient_id,
recipe_ingredients.measurement_id,
recipe_ingredients.unit_id,  ingredients.ingredient,
measurements.measurement, units.unit,
recipes.recipe_url
FROM recipe_ingredients
INNER JOIN ingredients ON
(recipe_ingredients.ingredient_id =
ingredients.ingredient_id) AND
(recipe_ingredients.recipe_id = 163)
INNER JOIN measurements ON
(recipe_ingredients.measurement_id =
measurements.measurement_id) AND
(recipe_ingredients.recipe_id = 163)
INNER JOIN units ON (recipe_ingredients.unit_id =
units.unit_id) AND (recipe_ingredients.recipe_id = 163)
INNER JOIN recipes ON (recipe_ingredients.recipe_id =
recipes.recipe_id) AND (recipe_ingredients.recipe_id =
163)


SELECT recipe_id, recipe_label, ingredient,
measurement, unit, recipe_url FROM banana_smoothie;
```

Stored function - grades recipe based on number of ingredients needed

```
CREATE VIEW numIngredients AS
SELECT recipe_id, COUNT(recipe_id) AS total_ingredients
FROM recipe_ingredients
GROUP BY recipe_id;

DELIMITER $$

CREATE FUNCTION recipeLevel(
        total_ingredients INT
)
RETURNS varchar(20)
DETERMINISTIC
BEGIN
        DECLARE recipeLevel VARCHAR(20);

    IF total_ingredients > 9 THEN
                        SET recipeLevel = 'COMPLEX';
        ELSEIF (total_ingredients <= 9 AND
                        total_ingredients >= 5) THEN
            SET recipeLevel = 'MEDIUM';
        ELSEIF total_ingredients < 5 THEN
                SET recipeLevel = 'SIMPLE';
        END IF;

                RETURN (recipeLevel);

END $$

DELIMITER :
```

```
SELECT recipe_id,
recipeLevel(total_ingredients)
FROM numingredients
ORDER BY recipe_ID;
```

SQL Queries

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Subquery - select recipe_id based on dietary requirement

```
SELECT recipe_id
FROM recipe_dietary_req
WHERE dietary_requirement_id =
(SELECT dietary_requirement_id
FROM dietary_requirements
WHERE dietary_requirement = 'vegan');
```

Example query with group by and having - Selects recipes with fewer than four ingredients.

```
SELECT recipe_id
FROM recipe_ingredients
GROUP BY(recipe_id)
HAVING COUNT(ingredient_id) <4;
```

Stored procedure - Selects all recipes based on one ingredient.

```
DELIMITER //

CREATE PROCEDURE selectAllRecipes(
IN my_ingredient VARCHAR(50)
)
BEGIN
SELECT a.recipe_id, c.recipe_label, c.recipe_url
FROM recipe_ingredients a
          INNER JOIN ingredients b
     ON a.ingredient_id = b.ingredient_id
          INNER JOIN recipes c
     ON a.recipe_id = c.recipe_id
     WHERE b.ingredient = my_ingredient;

END //

DELIMITER ;
```

```
CALL selectAllRecipes('banana');
```