

CS 340 Database Project Final Portfolio

Team members

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Project Title

Dope Eats

Website

<http://flip1.engr.oregonstate.edu:56305/>

Executive Summary

Upgrades to Draft for Project 6

Implemented dynamic search backend on Users Table

Upgrades to Draft for Project 5

Implemented Crud for all other tables

Fixed edit function on Users

Updated UI to make more sense

Upgrades to Draft for Project 4

Implemented CRUD for Users table

Upgrades to Draft for Project 3

Updated UI spacing and labeling errors

Added cascading delete

Added dynamic search UI

Upgrades to Draft for Project 2

Updated use of quotation marks, NULL was already inserted correctly.

Upgrades to Draft for Project 1

Added FKs to Ingredients in Recipes, Recipes, User Recipes, and Users.

Added additional attributes that will give the tables more context.

Removed “not NULL” designation from restrictionID in users and recipes.

Overview

Our client is a company named “Dope Eats” which provides an online platform that connects thousands of food enthusiasts with a database of over 10,000 diverse recipes designed to accommodate a range of over 50 dietary restrictions. For this platform Dope Eats needs a relational database driven website which is effective at managing user profiles, and contains a library of recipes, ingredients, and dietary restrictions. Specifically, the platform should allow users to browse different recipes, as well as make specific searches for recipes containing

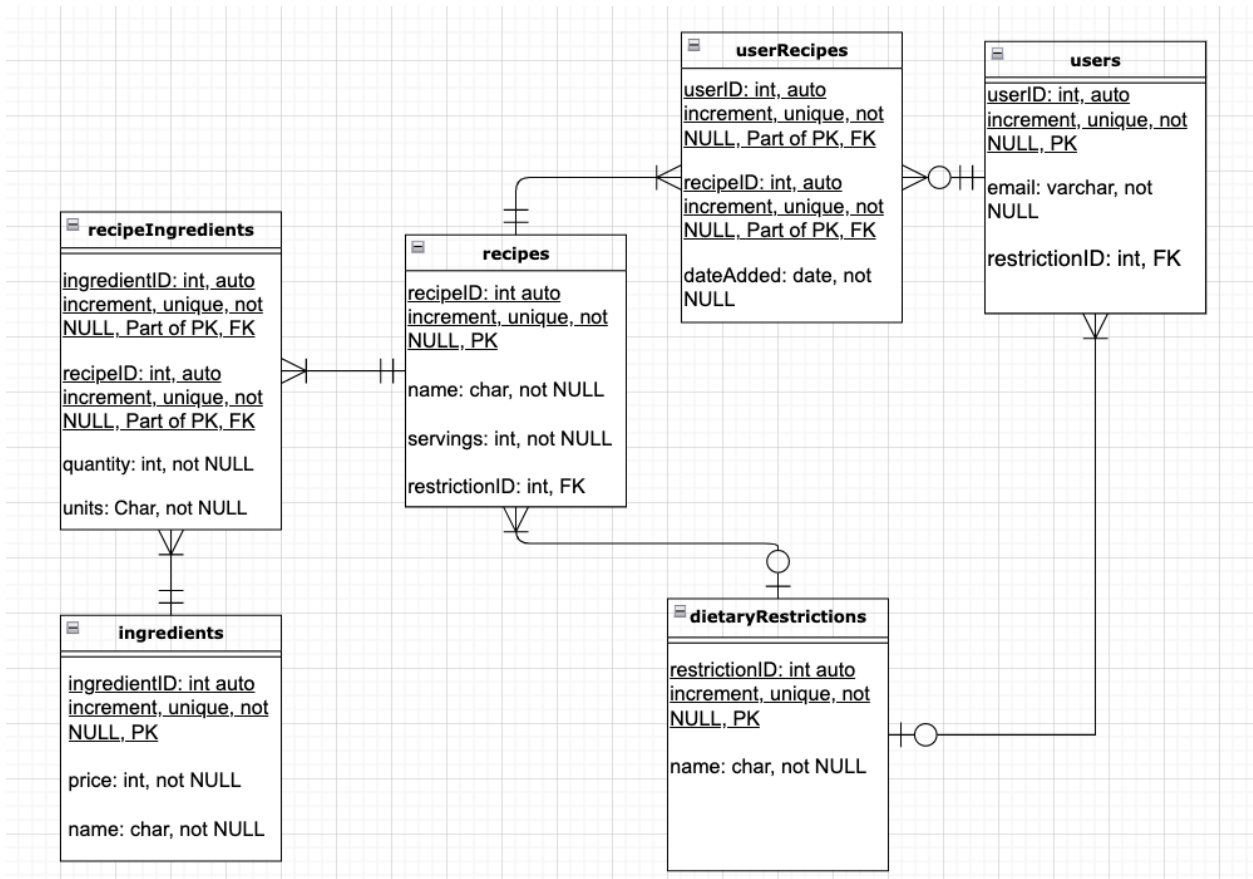
desired ingredients or catering to their dietary restriction. Users should also be able to save recipes they like in a way that they will be easily accessible in the future. Dope Eats has a stable and steadily growing user base, and their desire is that the platform puts an emphasis on simplicity and usability while also requiring minimal system maintenance.

Outline

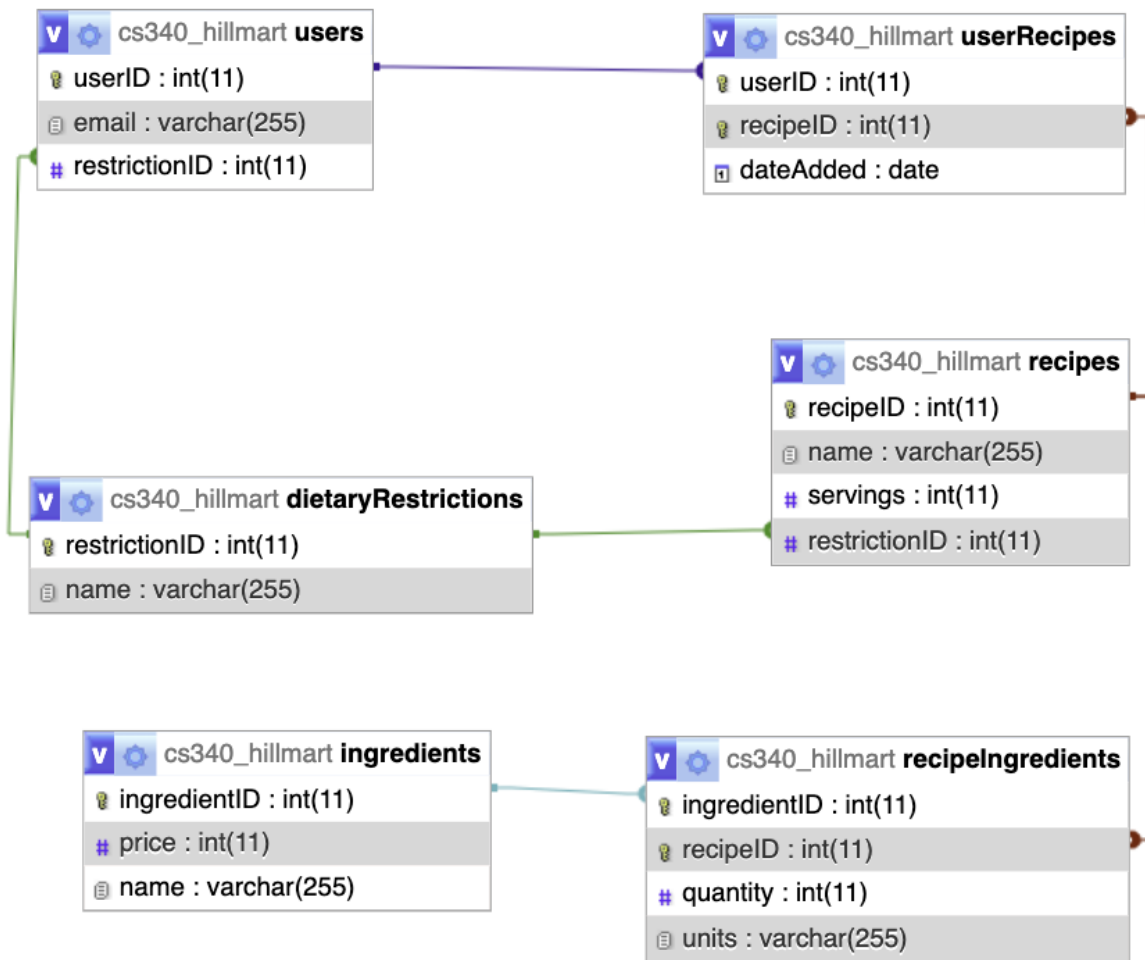
- users - database of users, storing their email, ID connects to recipes
 - userID: int, auto increment, unique, not NULL, PK
 - email: varchar, not NULL
 - restrictionID: int, FK
 - M:N relationship with Recipes
 - M:N relationship with Dietary Restrictions
- recipes - database of recipes, storing name and serving, ID connects to ingredients, users, and dietary restrictions
 - recipeID: int auto increment, unique, not NULL, PK
 - name: char, not NULL
 - servings: int, not NULL
 - restrictionID: int, FK
 - M:N relationship with Users
 - 1:N relationship with Dietary Restrictions
 - M:N relationship with Ingredients
- ingredients - database of ingredients, storing their price and name, ID connects to recipes
 - ingredientID: int auto increment, unique, not NULL, PK
 - price: int, not NULL
 - name: char, not NULL
 - M:N relationship with Recipes
- dietaryRestrictions - database of dietary restrictions storing name, ID connects to users and recipes
 - restrictionID: int auto increment, unique, not NULL, PK
 - name: char, not NULL
 - M:1 relationship with Users
 - M:1 relationship with Recipes
- userRecipes - database to join Users and Recipes. Stores both IDs and date added
 - userID: int auto increment, unique, not NULL, PK, FK
 - recipeID: int auto increment, unique, not NULL, PK, FK
 - dateAdded: date, not NULL
 - 1:N relationship with Users
 - 1:N relationship with Recipes
- recipeIngredients - database to connect recipes and ingredients, stores ID and quantity
 - recipeID: int auto increment, unique, not NULL, PK, FK
 - ingredientID: int auto increment, unique, not NULL, PK, FK
 - quantity: int, not NULL

- units: char, not NULL
- 1:N relationship with ingredients
- 1:N relationship with Recipes

ERD



Schema



Normalization Spreadsheet with Example Data

3NF							
users				recipes			
userID	email	restrictionID		recipeID	name	servings	restrictionID
1	john.doe@example.com	1		1	Tomato Soup	4	1
2	jane.smith@example.com	2		2	Grilled Chicken	2	NULL
3	mark.jones@example.com	3		3	Vegan Tacos	4	3
4	emma.taylor@example.com	1		4	Gluten-free Pasta	4	2
5	will.brown@example.com	2		5	Garden Salad	2	1
userRecipes				ingredients			
userID	recipeID	dateAdded		ingredientID	price	name	
1	1	2023-04-01		1	1	Tomatoes	
2	3	2023-04-05		2	2	Chicken	
2	2	2023-04-05		3	1	Lettuce	
3	3	2023-04-10		4	3	Vegan Cheese	
4	4	2023-04-15		5	1	Gluten-free Noodles	
5	5	2023-04-20					
dietaryRestrictions				recipeIngredients			
restrictionID	name			recipeID	ingredientID	quantity	units
1	Vegetarian			1	1	4	cups
				1	3	2	cups
2	Gluten-free			2	2	1	pounds
3	Vegan			3	4	1	packages
				4	5	1	packages
				5	3	4	cups
				5	1	2	cups

UI Screenshots

Users Create/Read/Browse/Display/Delete/Search

Users

[Home](#) | [Users](#) | [Recipes](#) | [Ingredients](#) | [Dietary Restrictions](#) | [User Recipes](#) | [Recipe Ingredients](#)

Browse Users

Edit	Delete	userId	email	restrictionId
Edit	Delete	18	lol@new.com	None
Edit	Delete	19	New@user.com	2
Edit	Delete	20	newuser@check.com	5

Search for users...

Search

Add User

email: dietary restriction:

Add User

Users Edit

[Back to Users](#)

Edit User

email: dietary restriction:

Recipes Create/Read/Browse/Display/Delete

Recipes

[Home](#) | [Users](#) | [Recipes](#) | [Ingredients](#) | [Dietary Restrictions](#) | [User Recipes](#) | [Recipe Ingredients](#)

Browse Recipes

Edit	Delete	recipeId	name	servings	restrictionId
Edit	Delete	2	Hotdog	1	1
Edit	Delete	4	Gluten-free Pasta	4	2

Add Recipe

name	<input type="text"/>	servings	<input type="text"/>	dietary restriction:	<input type="text" value="No restriction"/>
<input type="button" value="Add Recipe"/>					

Recipes Edit

[Back to Recipes](#)

Edit Recipe

name:	<input type="text" value="Hotdog"/>	servings:	<input type="text" value="1"/>	dietary restriction:	<input type="text" value="No restriction"/>	<input type="button" value="Update Recipe"/>
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Ingredients Create/Read/Browse/Display/Delete

Ingredients

[Home](#) | [Users](#) | [Recipes](#) | [Ingredients](#) | [Dietary Restrictions](#) | [User Recipes](#) | [Recipe Ingredients](#)

Browse Ingredients

Edit	Delete	ingredientID	price	name
Edit	Delete	1	1	Tomatoes
Edit	Delete	2	2	Chicken
Edit	Delete	3	1	Lettuce
Edit	Delete	4	3	Vegan Cheese

Add Ingredient

name price

Ingredients Edit

[Back to Ingredients](#)

Edit Ingredient

Price: Name:

Dietary Restrictions Create/Read/Browse/Display/Delete

Dietary Restrictions

[Home](#) | [Users](#) | [Recipes](#) | [Ingredients](#) | [Dietary Restrictions](#) | [User Recipes](#) | [Recipe Ingredients](#)

Browse Dietary Restrictions

Edit	Delete	restrictionID	name
Edit	Delete	1	Vegetarian
Edit	Delete	2	Gluten-free
Edit	Delete	4	Keto
Edit	Delete	5	Paleo

Add Dietary Restriction

Name

Dietary Restrictions Edit

[Back to Dietary Restrictions](#)

Edit Dietary Restriction

Name:

User Recipes Create/Read/Browse/Display/Delete


User Recipes

[Home](#) | [Users](#) | [Recipes](#) | [Ingredients](#) | [Dietary Restrictions](#) | [User Recipes](#) | [Recipe Ingredients](#)

Browse User Recipes

Edit	Delete	userId	recipeId	dateAdded
Edit	Delete	18	2	2023-06-07
Edit	Delete	18	4	2023-06-05


Add User Recipe

user ID: recipe ID: date added: 

User Recipes Edit

[Back to User Recipes](#)

Edit User Recipe

user ID: recipe ID: date added: 

Recipe Ingredients Create/Read/Browse/Display/Delete

Recipe Ingredients

[Home](#) | [Users](#) | [Recipes](#) | [Ingredients](#) | [Dietary Restrictions](#) | [User Recipes](#) | [Recipe Ingredients](#)

Browse Recipe Ingredients

Edit	Delete	recipeId	ingredientId	quantity	units
Edit	Delete	2	1	10	boxes

Add Recipe Ingredient

recipe ID: ingredient ID: quantity: units:

Recipe Ingredients Edit

[Back to Recipe Ingredients](#)

Edit Recipe Ingredient

recipe ID: ingredient ID: quantity: units: