RecyPy:
Domain Models

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Introduction

RecyPy is a web application used for sharing recipes. Similar to a cross between a social media app and a recipe database, in this system users will be able to create an account. Using this account, they will be able to post their own recipes, as well as "follow" other users or "star" their recipes. This creates a personalized experience for each user, as well as a foundation for further implementations, such as a rating system for individual recipes and the ability to categorize them. Users will be able to view a feed of recipes from the people they follow, as well as search new recipes in the search bar.

This document provides working domain models for the application, as well as tables summarizing relevant classes and their relationships.
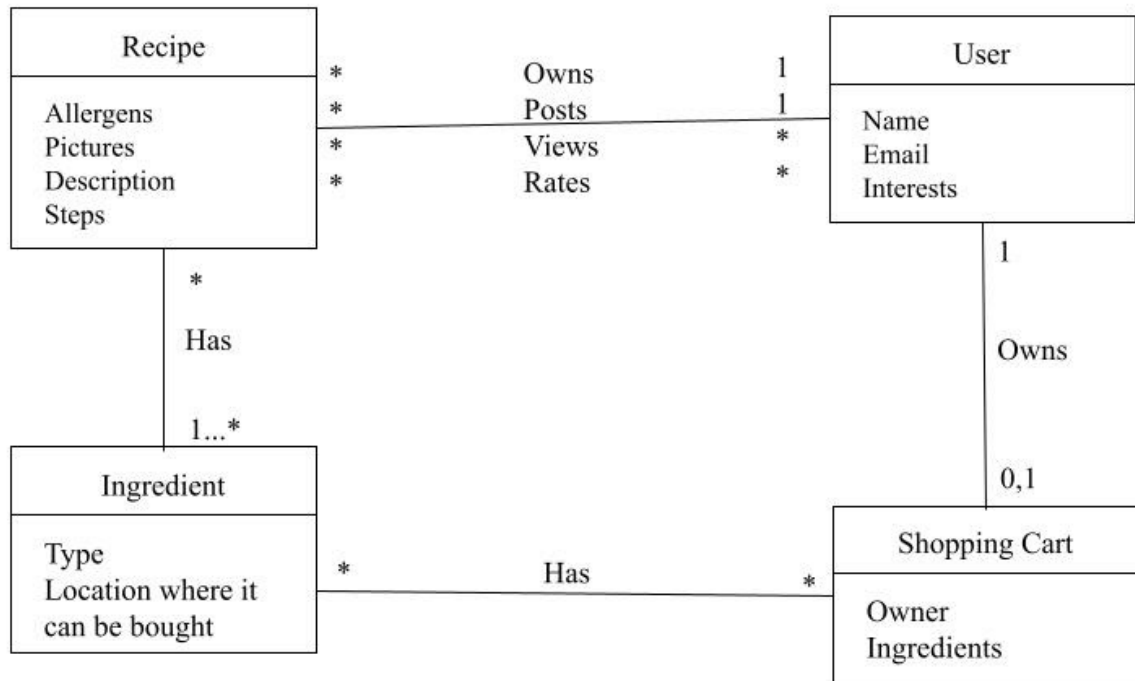
Overview of Classes

Class Name	Attributes [Data Type]	Functions
Ingredient	- Type [string] - Locations where it can be bought [Array<Location>]	
Recipe	- Allergens [Array<string>] - Pictures [Array<Picture>] - Description [string] - Steps [Array<string>]	
Shopping Cart	- Owner [User] - Ingredients [Array<Ingredient>]	- addIngredient -> bool - removeIngredient -> bool
User	- Name [string] - Email [string] - Interests [Array<string>]	- postRecipe -> bool - navigateToBuyIngredient -> None - viewRecipe -> Recipe - rateRecipe -> bool
Advertiser	- Name [string] - Company [string]	- viewShoppingCart -> bool - showAdvertisementsToUser -> bool
Advertisement	- Related ingredient [Ingredient] - Target user [User] - Text [string] - Image [Picture] - Link [string]	

Overview of relationships

[Quantity] Class One	Relationship	[Quantity] Class Two
[One] User	owns, posts	[Many] recipes
[Many] User	views, rates	[Many] recipes
[Many] Recipe	has	[One...Many] ingredients
[Many] Shopping Cart	contains	[Many] ingredients
[One] User	owns	[Zero, One] Shopping cart
[Many] Advertiser	Shows ads	[Many] user

| [Many] Advertiser | views | [Many] Shopping cart |

Domain Model 1: Recipes

Recipe		User
Allergens Pictures Description Steps	* Owns 1 * Posts 1 * Views * * Rates *	Name Email Interests

Recipe — * Has 1...* — Ingredient

User — 1 Owns 0,1 — Shopping Cart

Ingredient
Type Location where it can be bought

Ingredient — * Has * — Shopping Cart

Shopping Cart
Owner Ingredients

Domain Model 2: Advertisers