Ingredient

Ingredient
ingredientID INT
name VARCHAR(255)

Recipe

Recipe
recipeID INT
name VARCHAR(255)
description VARCHAR(255)
steps VARCHAR(255)

Rating

Rating
ratingID INT
recipeID INT (FK)
score REAL
review VARCHAR(255)
userID (FK)

FilterData

FilterData
filterdataID INT
recipeID INT (FK)
minutesToPrepare INT
numOfSteps INT
tags VARCHAR(255)
calories INT

User

User
userID INT
name VARCHAR(255)

Relationships:
- contains: Recipe 0..* — 1..* Ingredient
- rate: Recipe 1..1 — 0..* Rating
- categorized by: Recipe 1..1 — PK 1..1 FilterData
- rated by: Rating 0..* — 1..1 User

- Each **Recipe** is uniquely identified by recipeID and **Ingredient**, **User**, **Rating, FilterData,** and has attributes name, description, and steps.
- Each **Ingredient** is uniquely identified by ingredientID and has attributes name.
- Each **User** is uniquely identified by userID and has attributes name.
- Each **Rating** is uniquely identified by ratingID and **User,** and has attributes score, review.
- Each **FilterData** is uniquely identified by filterdataID and has attributes minutes to prepare recipe, number of steps of recipe, tags, and calories.
- **Recipe** should have at least one **Ingredient**, many **Rating**, and exactly one **FilterData.**
- **Ingredient** can have many **Recipe**.

- **User** can write many **Rating**.
- **Rating** should have exactly one **User**.
- **FilterData** should have exactly one **Recipe.**

Recipe (recipeID: INT [PK],
        name: VARCHAR(255),
        description: VARCHAR(255),
        steps: VARCHAR(255))

User (userID: INT[PK],
      name: VARCHAR(255))

Ingredient (ingredientID: INT[PK],
            name: VARCHAR(255))

Rating (ratingID: INT[PK],
        recipeID: INT[FK to Recipe.recipeID],
        score: Decimal,
        review: VARCHAR(255),
        userID: INT[FK to User.userID])

Filter Data (filterdataID: INT[PK],
             recipeID: INT[FK to Recipe.recipeID],
             minutesToPrepare: INT,
             numOfSteps: INT,
             tags: VARCHAR(255),
             calories: INT))

Contains (containsID: INT[PK],
          recipeID: INT[FK to Recipe.recipeID],
          ingredientID: INT[FK to Ingredient.ingredientID])