

Databases & Web Services Project 2022

Assignment 1

Peter Baumann, Jacobs University

Submission: individual, by mail to TA

Deadline: 2022-sep-22 23:59

1. ER Design

You are given the following entities:

- recipe (having name and description)
- ingredient (having name and description)
- category (having name and meal type, such as “ breakfast”)
- feedback (having the recipe and rating)

You are also given the following relations:

Each category can have several recipes

- Each recipe can be on multiple ingredients and multiple ingredients can be used in the same recipe
- For each ingredient in a recipe there is quantity expressed in grams which cannot be empty
- one recipe can have no or multiple feedbacks

Draw the Entity-Relationship diagram for the application above. Constraints you cannot represent in the diagram you can add as text.

2. Relational Design

Write SQL statements to create the relations corresponding to the ER diagram above. Capture as many of the constraints as possible (including primary key and foreign key information). If you cannot capture some constraints, explain why.

Remember what has been said in class about primary keys!