TIBCO Assignment

Recipe Manager Web Application API Documentation

Introduction

The Recipe Manager Web Application API allows users to manage their recipes. Users can view all available recipes, create new recipes, update existing ones, and delete recipes.

Architecture



It is designed using the OpenAPI Specification 3.0 (OAS 3.0). It follows the RESTful architectural principles and utilizes the OAS 3.0 features:

OAS 3.0 Features Utilized

1. components:- Holds a set of reusable objects for different aspects
2. x-scenarios , x-database and x-documentation used to provide additional information

Database Schema

Preferred open-source DB: PostgreSQL

CREATE TABLE recipes (

  name PRIMARY KEY VARCHAR(100) NOT NULL,

  creation\_date TIMESTAMP,

  vegetarian BOOLEAN,

  servings INT,

  ingredients TEXT,

  cooking\_instructions TEXT

);

Basic Testing Scenarios:

Here are some basic testing scenarios for the application:

Scenario 1:

Retrieve All Recipes

Send a GET request to /recipes.

Ensure the response status code is 200.

Validate that the response body contains a list of recipes.

Scenario 2:

Create a New Recipe

Send a POST request to /recipes with the required data in the request body

Ensure the response status code is 201.

Validate that the response body contains the newly created recipe with the correct attributes.

Scenario 3:

Retrieve a Specific Recipe by ID

Send a GET request to /recipes/{name} with a valid recipe ID.

Ensure the response status code is 200.

Validate that the response body contains the recipe with the specified ID.

Scenario 4:

Update an Existing Recipe

Send a PUT request to /recipes/{name} with a valid recipe ID and the updated data in the request body (including the API key for authentication).

Ensure the response status code is 200.

Validate that the response body contains the updated recipe with the correct attributes.

Scenario 5:

Delete a Recipe

Send a DELETE request to /recipes/{name} with a valid recipe ID (including the API key for authentication).

Ensure the response status code is 204 (indicating a successful deletion).

Try to retrieve the deleted recipe using its name and verify that the response status code is 404 (indicating the recipe is not found).