Work on project. Stage 4/5: Sort & update

Project: Recipes

Sort & update

■ Hard ② 2 hours ② 469 users solved this stage. Latest completion was about 1 hour ago.

Description

In this stage, we continue with improving our application. It would be good to retrieve all recipes related to a category (beverages, salads, desserts, and so on), to search for a recipe by name, to update a recipe, or to find out when a recipe was uploaded or updated. To do that, you need two additional fields: category and date. One field is a recipe category, the other field stores the date. You also need to add two new endpoints. One endpoint will update recipes, the other receives the query parameters that will allow searching for recipes by a category or name.

Objectives

Don't forget to keep the functionality from the previous stages. This is what your program can do:

- POST /api/recipe/new receives a recipe as a JSON object and returns a JSON object with one id field;
- GET /api/recipe/{id} returns a recipe with a specified id as a JSON object;
- DELETE /api/recipe/{id} deletes a recipe with a specified id.

In this stage, the recipe structure should contain two new fields:

- category represents a category of a recipe. The field has the same restrictions as name and description. It shouldn't be blank;
- date stores the date when the recipe has been added (or the last update). You can use any date/time format, for example 2021-09-05T18:34:48.227624 (the default LocalDateTime format), but the field should have at least 8 characters.

Also, the service should support the following endpoints:

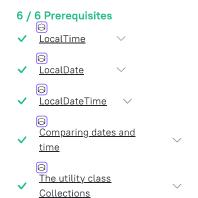
- PUT /api/recipe/{id} receives a recipe as a JSON object and updates a recipe with a specified id. Also, update the date field too. The server should return the 204 (No Content) status code. If a recipe with a specified id does not exist, the server should return 404 (Not found). The server should respond with 400 (Bad Request) if a recipe doesn't follow the restrictions indicated above (all fields are required, string fields can't be blank, arrays should have at least one item);
- GET /api/recipe/search takes one of the two mutually exclusive query parameters:
 - 1. category if this parameter is specified, it returns a JSON array of all recipes of the specified category. Search is case-insensitive, sort the recipes by date (newer first);
 - 2. name if this parameter is specified, it returns a JSON array of all recipes with the names that **contain** the specified parameter. Search is case-insensitive, sort the recipes by date (newer first).

If no recipes are found, the program should return an empty JSON array. If 0 parameters were passed, or more than 1, the server should return 400 (Bad Request). The same response should follow if the specified parameters are not valid. If everything is correct, it should return 200 (0k).

There is a couple of ways to do that. Check the examples below for details. If you need more theory on how to get data from a database or how to process query parameters, take a look at <u>Query Methods</u> paragraph in the Official Documentation (check the table), or the <u>@RequestParam annotation</u>.

Examples

Example 1: POST /api/recipe/new request



Show all

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Discuss your current project with fellow learners and help each other.

```
{
   "name": "Fresh Mint Tea",
   "category": "beverage",
   "description": "Light, aromatic and refreshing beverage, ...",
   "ingredients": ["boiled water", "honey", "fresh mint leaves"],
   "directions": ["Boil water", "Pour boiling hot water into a mug", "Add fresh mint leaves", "Mix and let the mint
5 minutes", "Add honey and mix again"]
}
```

Response:

```
{
    "id": 1
}
```

Further GET /api/recipe/1 response:

```
{
   "name": "Fresh Mint Tea",
   "category": "beverage",
   "date": "2020-01-02T12:11:25.034734",
   "description": "Light, aromatic and refreshing beverage, ...",
   "ingredients": ["boiled water", "honey", "fresh mint leaves"],
   "directions": ["Boil water", "Pour boiling hot water into a mug", "Add fresh mint leaves", "Mix and let the mint
5 minutes", "Add honey and mix again"]
}
```

Hint

Example 2: PUT /api/recipe/1 request

```
{
   "name": "Warming Ginger Tea",
   "category": "beverage",
   "description": "Ginger tea is a warming drink for cool weather, ...",
   "ingredients": ["1 inch ginger root, minced", "1/2 lemon, juiced", "1/2 teaspoon manuka honey"],
   "directions": ["Place all ingredients in a mug and fill with warm water (not too hot so you keep the beneficial h
10 minutes", "Drink and enjoy"]
}
```

Further response for the GET /api/recipe/1 request:

```
{
   "name": "Warming Ginger Tea",
   "category": "beverage",
   "date": "2021-04-06T14:10:54.009725",
   "description": "Ginger tea is a warming drink for cool weather, ...",
   "ingredients": ["1 inch ginger root, minced", "1/2 lemon, juiced", "1/2 teaspoon manuka honey"],
   "directions": ["Place all ingredients in a mug and fill with warm water (not too hot so you keep the beneficial h
10 minutes", "Drink and enjoy"]
}
```

Example 3: A database with several recipes

```
"name": "Iced Tea Without Sugar",
   "category": "beverage",
   "date": "2019-07-06T17:12:32.546987",
},
{
   "name": "vegan avocado ice cream",
   "category": "DESSERT",
   "date": "2020-01-06T13:10:53.011342",
},
{
   "name": "Fresh Mint Tea",
   "category": "beverage",
   "date": "2021-09-06T14:11:51.006787",
},
{
   "name": "Vegan Chocolate Ice Cream",
   "category": "dessert",
   "date": "2021-04-06T14:10:54.009345",
},
{
   "name": "warming ginger tea",
   "category": "beverage",
   "date": "2020-08-06T14:11:42.456321",
}
```

Response for the GET /api/recipe/search/?category=dessert request:

Response for the GET /api/recipe/search/?name=tea request:

```
{
        "name": "Fresh Mint Tea",
        "category": "beverage",
       "date": "2021-09-06T14:11:51.006787",
    },
    {
        "name": "warming ginger tea",
       "category": "beverage",
       "date": "2020-08-06T14:11:42.456321",
    },
    {
        "name": "Iced Tea Without Sugar",
       "category": "beverage",
       "date": "2019-07-06T17:12:32.546987",
    },
 ]
Search is case-insensitive, the recipes are sorted by date.

★ See hint

√ Write a program
Code Editor
                 <u>IDE</u>
  CONNECTION STATUS
    ✓ IDE is responding IntelliJ IDEA 2022.1.2
    ✓ EduTools plugin is responding 2022.5-2022.1-343
    Solve in IDE
                   © Synchronizing IDE may take a while
```

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Look up solution (100)