Bon App-étit

Regular Exam [Spring Fundamentals]

Introducing the **Bon App-étit**, your culinary companion for exploring new tastes and connecting with fellow food enthusiasts. This app is all about taking your cooking experience to the next level by offering a wide range of recipes to suit your palate. Browse through hundreds of innovative recipes created by passionate chefs and home cooks. You can add your favorite dishes to your personal recipe collection, share your own culinary creations, and discover exciting flavour combinations. Unleash your inner chef and embark on a
gastronomic journey with Bon App-étit!

There are several requirements you must follow in the implementation:

1. Database Requirements

The **Database** of the **Bon App-étit** application needs to support **3 entities**:

User

- **Id** – Accepts **UUID-String** or **Long** values
- **Username**
  - The **length** of the **values** should be **between 3** and **20** characters long (both numbers are **INCLUSIVE**)
  - The values should be **unique** in the database
- **Password**
  - The **length** of the **values** should be **between 3** and **20** characters long (**INCLUSIVE**)
- **Email**
  - The values should contain a **'@'** symbol)
  - The values should be **unique** in the database
- **Added Recipes**
  - A collection that contains all recipes that the user added. One user may **have many** recipes and one recipe can be added by **only one** user.
- **Favourite Recipes**
  - A collection that contains recipes that the user marked as favourite. One user may **have many** recipes and one recipe can be marked as favourite by **many** users.

Recipe

- **Id** – Accepts **UUID-String** or **Long** values
- **Name**
  - The **length** of the **values** should be **between 2** and **40** characters long (both numbers are **INCLUSIVE**)
- **Ingredients**
  - The **length** of the **values** should be **between 2** and **80** characters long (both numbers are **INCLUSIVE**)
- **Category**
  - The **length** of the **values** should be **between 2** and **200** characters long (both numbers are **INCLUSIVE**)
- **Added by**
  - The user who added the recipe in the app. One recipe **has one** user, but one user may **have added many** recipes.

Category

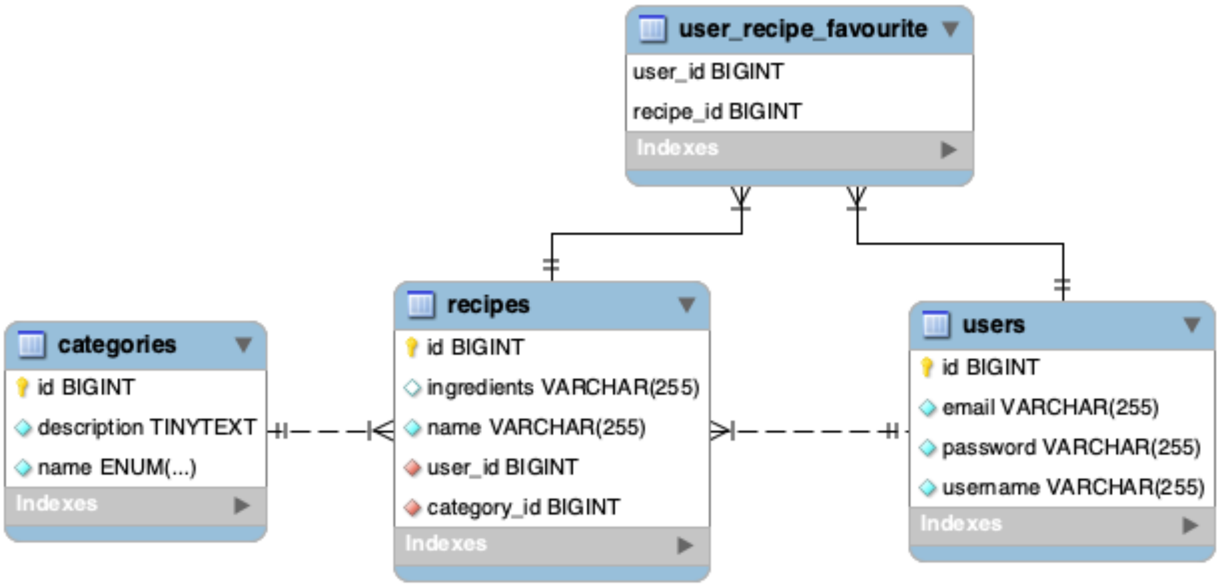
- **Id** – Accepts **UUID-String** or **Long** values
- **Category name**
  - an option between (**MAIN_DISH**, **DESSERT, COCKTAIL**)
- **Description**
  - For MAIN_DISH - "Heart of the meal, substantial and satisfying; main dish delights taste buds."
  - For DESSERT – "Sweet finale, indulgent and delightful; dessert crowns the dining experience with joy."
  - For COCKTAIL – "Sip of sophistication, cocktails blend flavours, creating a spirited symphony in every glass."
- **Recipes**
  - One category may **have many** recipes, but one recipe has **only one** category.

Nullable/Empty/Blank values are not allowed unless explicitly mentioned. Implement the entities with the **correct data types** and implement the **repositories** for them.

2. Initialize categories

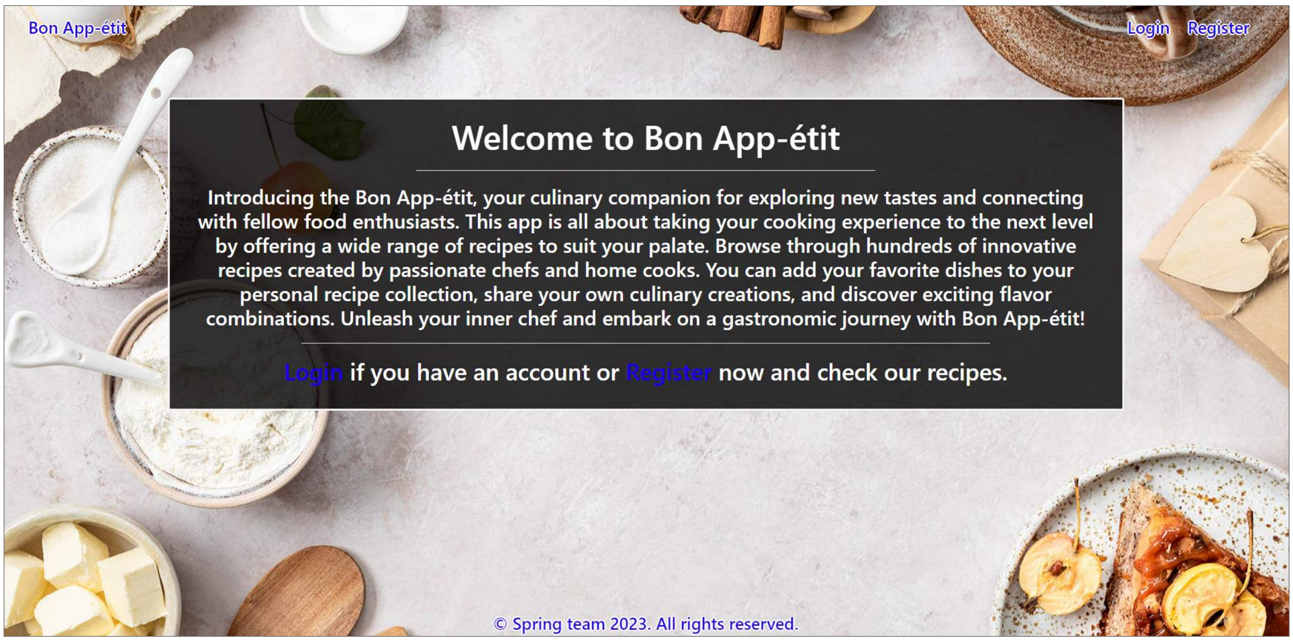
- Implement a method that checks (when app started) if the database does not have any **categories** and initialize them
  - You are free to do this in some different ways
  - You can skip the description if you want

Here is the ER diagram:



3. Page Requirements

Index Page (logged out user)



Bon App-étit

Login Register

Welcome to Bon App-étit

Introducing the Bon App-étit, your culinary companion for exploring new tastes and connecting with fellow food enthusiasts. This app is all about taking your cooking experience to the next level by offering a wide range of recipes to suit your palate. Browse through hundreds of innovative recipes created by passionate chefs and home cooks. You can add your favorite dishes to your personal recipe collection, share your own culinary creations, and discover exciting flavor combinations. Unleash your inner chef and embark on a gastronomic journey with Bon App-étit!

Login if you have an account or Register now and check our recipes.

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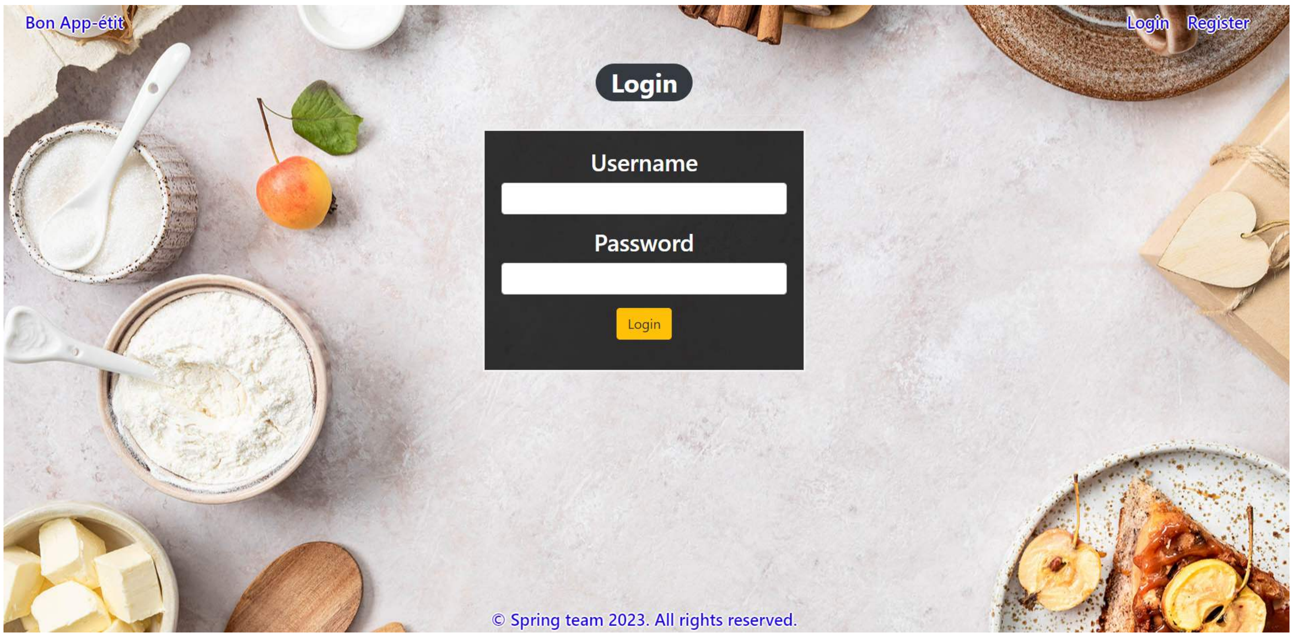
Login Page (logged out user)



Bon App-étit

Login Register

Login

Username

Password

Login

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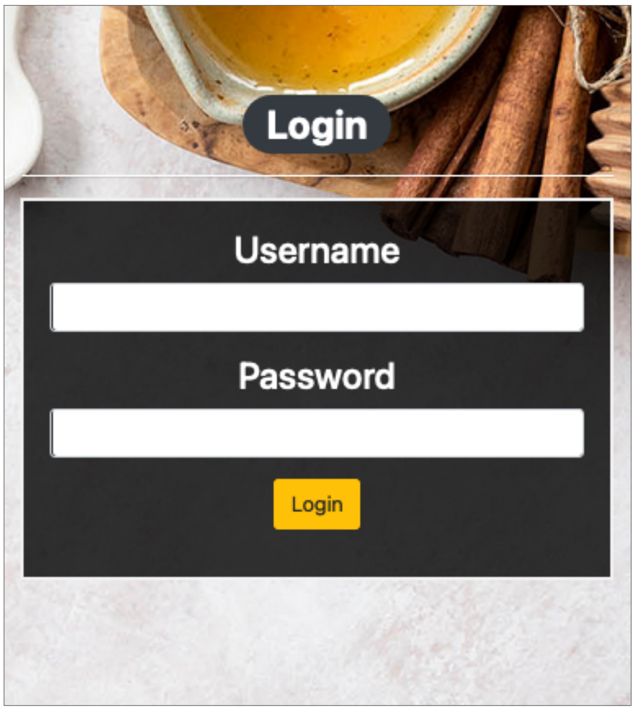
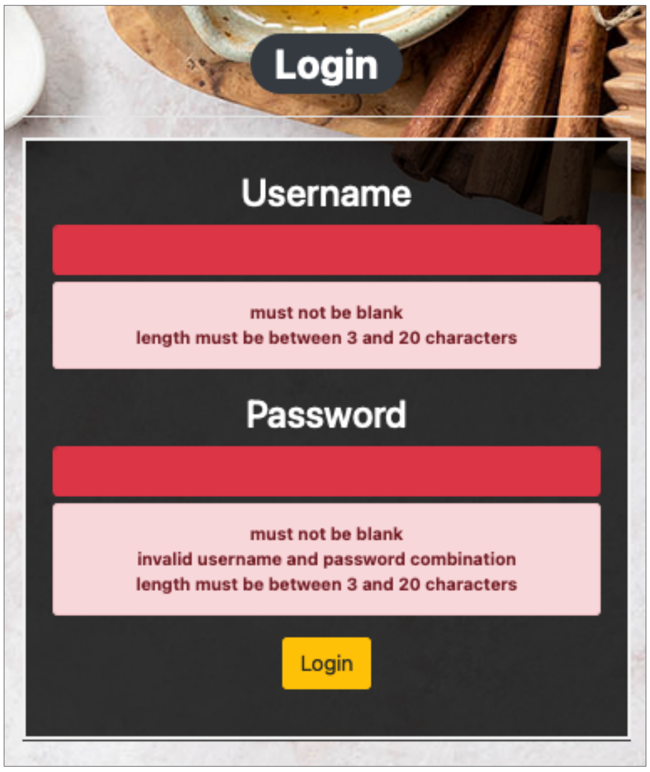
Login Page validations

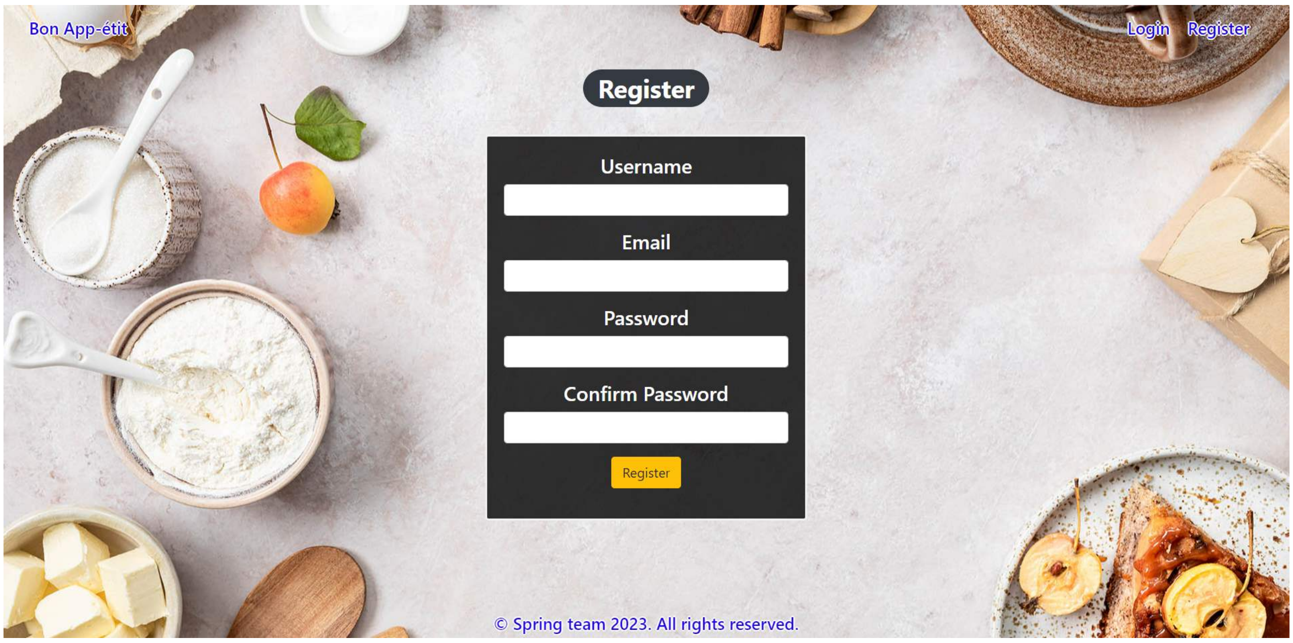




must not be blank
length must be between 3 and 20 characters

must not be blank
invalid username and password combination
length must be between 3 and 20 characters

Registration Page (logged out user)



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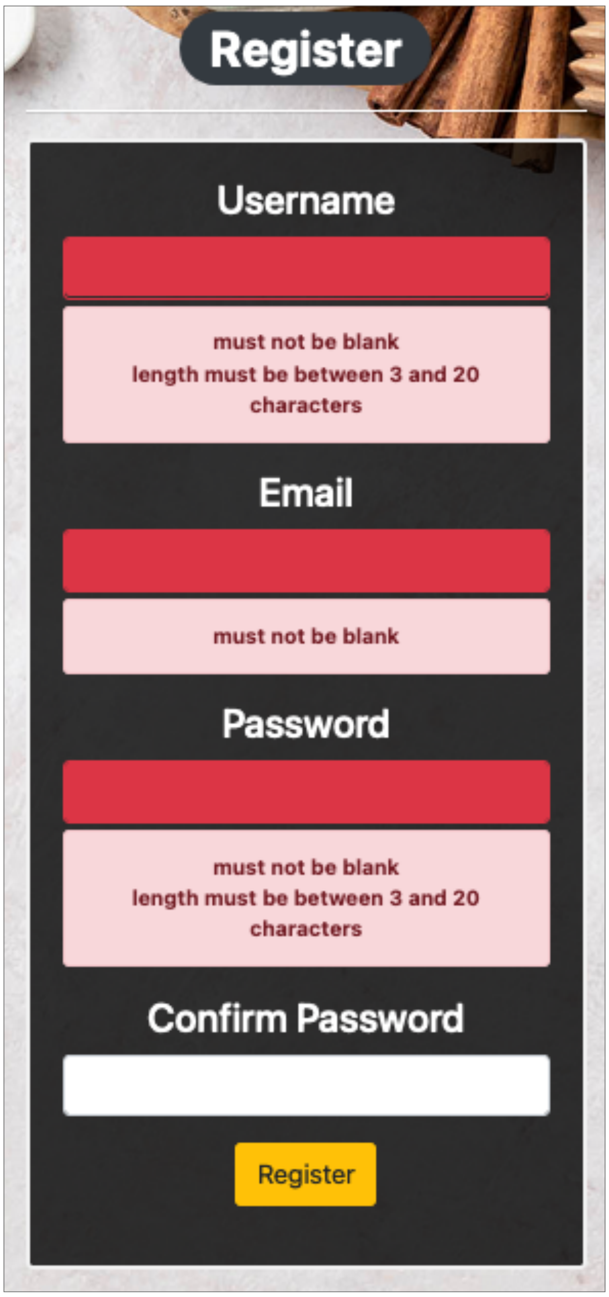
Registration Page validations



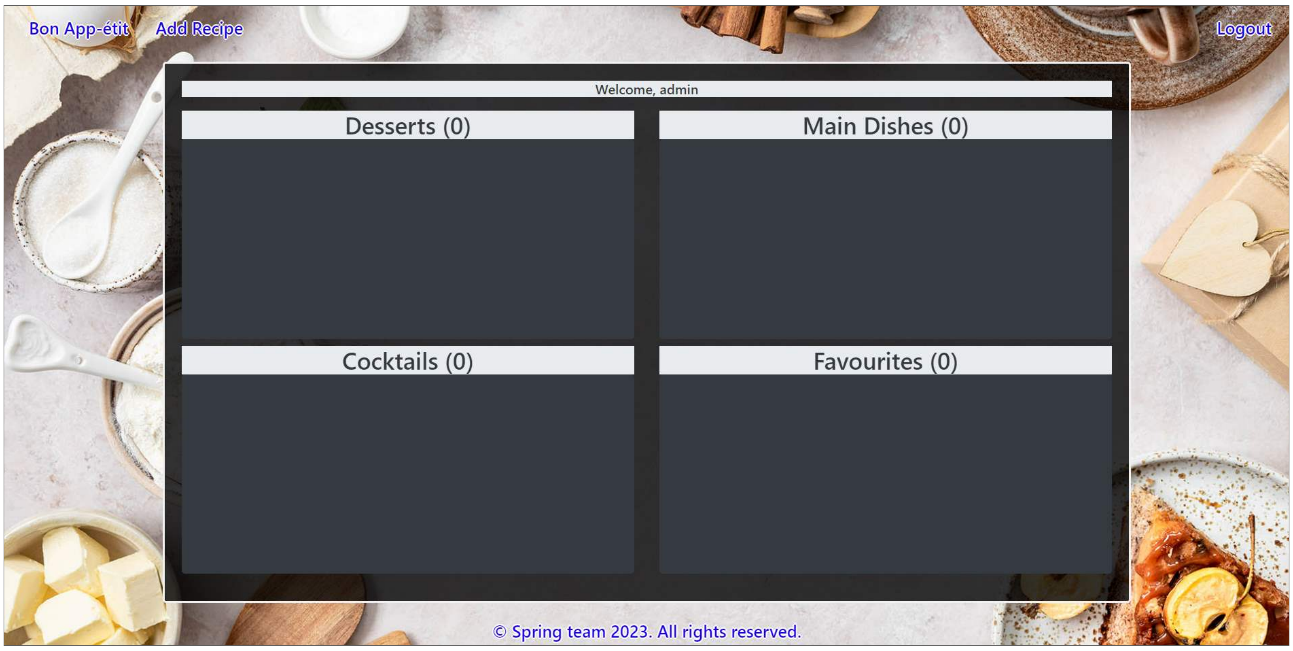
must not be blank
length must be between 3 and 20 characters

must not be blank

must not be blank
length must be between 3 and 20 characters

Home Page (without having any recipes)

- The upper left section (Desserts) of the page should display **all of the added recipes for Desserts** from the database from all users.
- The upper right section (Main Dishes) of the page should display **all of the added recipes for Main Dishes** from the database from all users.
- The bottom left section (Cocktails) of the page should display **all of the added recipes for Cocktails** from the database from all users.
- The bottom right section (Favourites) of the page should display **all recipes marked as favourites** in the database by users.


Bon App-étit
Add Recipe
Logout
Welcome, admin
Desserts (0)
Main Dishes (0)
Cocktails (0)
Favourites (0)
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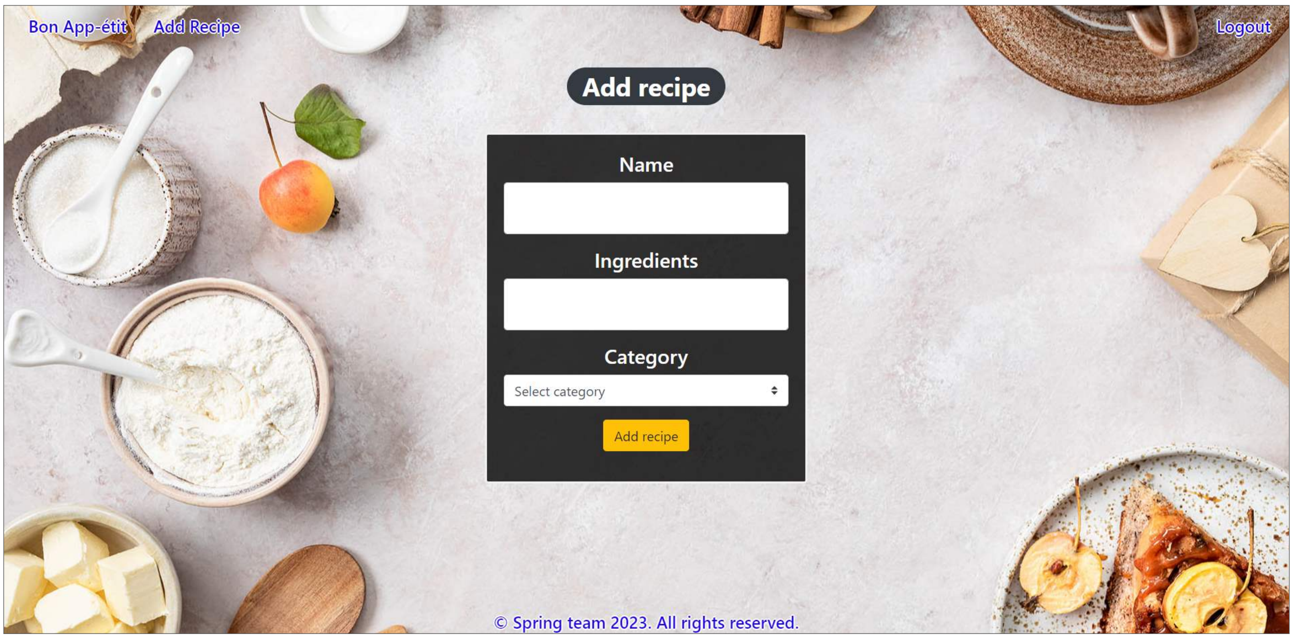
Add Recipe


Bon App-étit
Add Recipe
Logout
Add recipe
Name
Ingredients
Category
Select category
Add recipe
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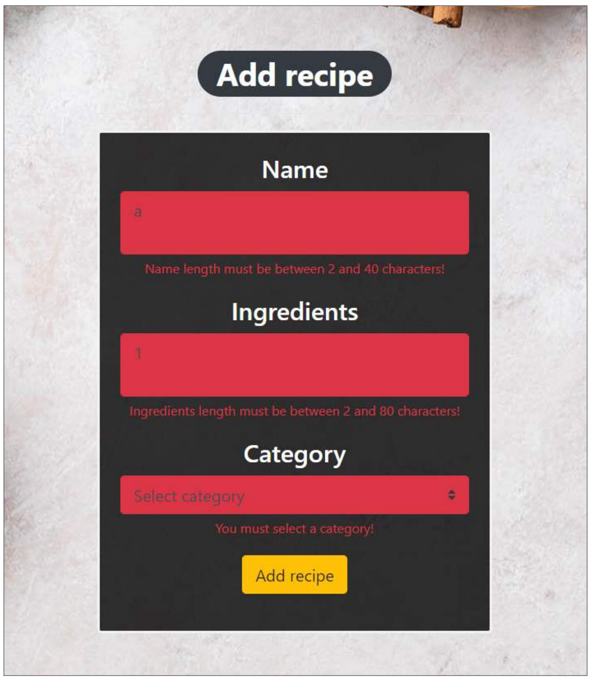
Add Recipe Validation



Add recipe

Name

a

Name length must be between 2 and 40 characters!

Ingredients

1

Ingredients length must be between 2 and 80 characters!

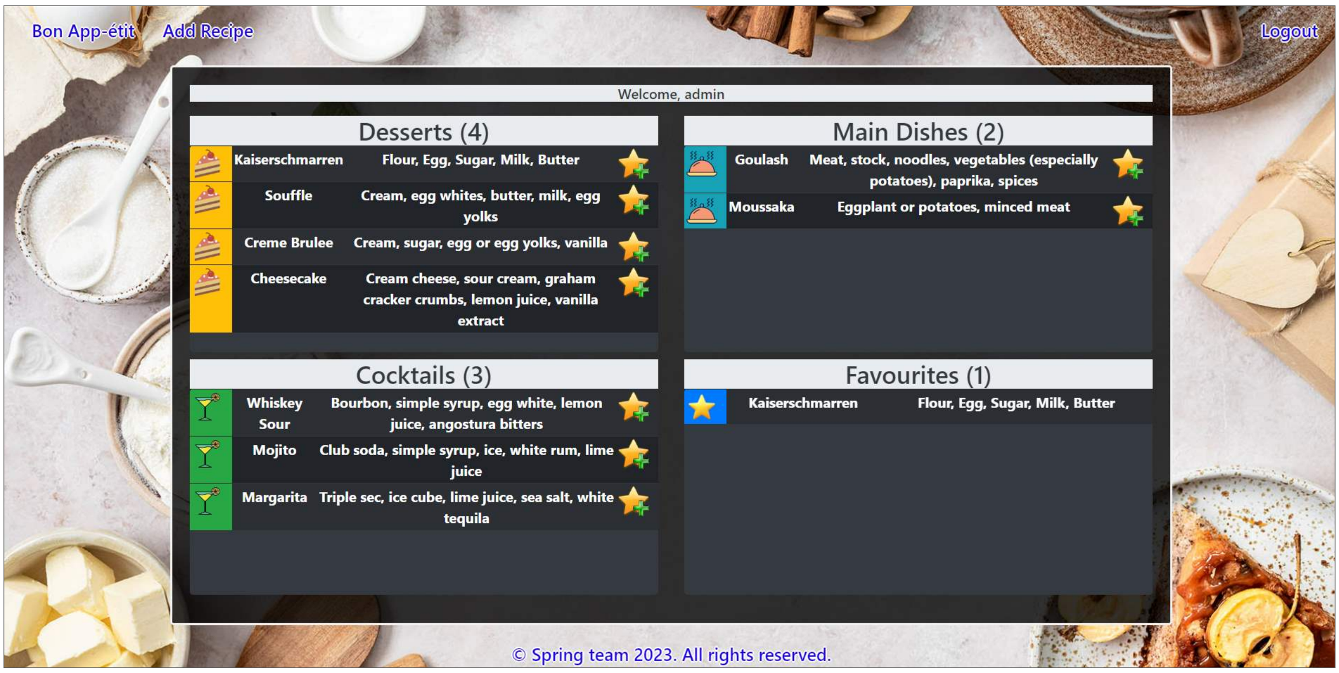
Category

Select category

You must select a category!

Add recipe

Home Page (with recipes)



Welcome, admin

Desserts (4)

Kaiserschmarren	Flour, Egg, Sugar, Milk, Butter	
Souffle	Cream, egg whites, butter, milk, egg yolks	
Creme Brulee	Cream, sugar, egg or egg yolks, vanilla	
Cheesecake	Cream cheese, sour cream, graham cracker crumbs, lemon juice, vanilla extract	

Main Dishes (2)

Goulash	Meat, stock, noodles, vegetables (especially potatoes), paprika, spices	
Moussaka	Eggplant or potatoes, minced meat	

Cocktails (3)

Whiskey Sour	Bourbon, simple syrup, egg white, lemon juice, angostura bitters	
Mojito	Club soda, simple syrup, ice, white rum, lime juice	
Margarita	Triple sec, ice cube, lime juice, sea salt, white tequila	

Favourites (1)

Kaiserschmarren	Flour, Egg, Sugar, Milk, Butter

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The templates have been given to you in the application skeleton, so make sure you implement the pages correctly.

NOTES:

- The templates should look **EXACTLY** as shown above
- The templates do **NOT require additional CSS** for you to write. Only **bootstrap** and the **given CSS** are enough.

4. Functional Requirements

The Functionality Requirements describe the functionality that the application must support. The application should provide **Guest** (not logged in) users with the functionality to log in, register and view the Index page.

The application should provide **Users** (logged in) with the functionality to **log out, add a new recipe (Add Recipe page), view all recipes (Home page) and add recipes to Favourites section.**

BonAppetit in navbar should redirect to the appropriate URL depending on that if the user is logged in. The application should provide functionality for adding recipes with category of **Main Dish, Dessert, or Cocktail**.

On the **Home Page**, recipes should be **organized** into their respective categories: main dish recipes in the **Main Dishes** section, dessert recipes in the **Desserts** section, cocktail recipes in the **Cocktails** section, and favorite recipes in the **Favourites** section.

Above these sections, a **greeting text** displaying the current user's username is located: "Welcome, {username}".
Next to the name of each section on the **Home page** is a **counter** indicating the **number of recipes** in the current section.

Each recipe is accompanied by a **star with a plus icon**. When **clicked**, the selected recipe stays in the current section but is also added to the current user's **favourite recipes** collection. If the recipe is already present in the favourites collection, no action should be taken.

The application should store its data in a MySQL database.

5. Security Requirements

The Security Requirements are mainly access requirements. Configurations about which users can access specific functionalities and pages.

- **Guest** (not logged in) users can access:
  - **Index** page;
  - **Login** page;
  - **Register** page.
- **Users** (logged in) can access:
  - **Home** page;
  - **Add Recipe** page;
  - **Logout** functionality.

6. Submitting

- When submitting a solution it is necessary to make an **archived file** of **src + pom.xml/ build.gradle** and **settings.gradle**.
- The judge's usual behavior is to return a "Compile time error" as a response when a solution is successfully uploaded.
- Only the **last** file submitted will be checked and evaluated.