


# Tasty Trove Recipe Finder

## Problem Statement:

 Classroom

Dependency Injection in Spring boot  
[Tasty Trove Recipe Finder](#)

Problem Submissions Solutions Doubts

Moderate Score 160/160 Advanced java Spring Hibernate

### Problem statement

A developer is creating an application called **Tasty Trove Recipe Finder**, which helps users find recipes. He needs help to complete the console application using Spring Boot and concepts of dependency injection.

The application should take inputs from the user for the recipe type and ingredients and show output accordingly.

The Template link is below; you must download and complete the tasks mentioned.

Tasks:-

- Complete the three classes, Chinese, Northindian, and Southindian, each implementing the Recipe interface having similar attributes:
  - name(String), userName(String), Ingredients(interface)
  - setIngredients(Ingredients ingredients): This method injects the Ingredients interface into the classes using setter injection.
  - Override the Recipe interface methods mentioned below:
    - getDetails(): The method prints the following message on the console "Hello user John we suggest you to make Chinese Fried Rice you can use the following ingredients:
      - Steamed Rice
      - Ginger
      - Garlic
      - Soy Sauce
      - Vinegar

The above message contains the username, dishName, and lastly the list of suggested ingredients based on the type of recipe selected by the user.

  - setUserName(String userName): This method sets the username.
- Complete the three classes Lentils, Rice, and Wheat, each implementing the Ingredients interface:
  - Create a constructor and initialize the recipe lists with some ingredients of your choice.
  - Override the interface methods mentioned below:
    - setIngredient(String ingredient): This method sets ingredient flags (isChinese, isNorthindian, isSouthindian) based on the type of recipe and ingredient selected by the user.

Problem Submissions Solutions Doubts

- getDishDetail(): This method returns a dish name in string format based on the ingredient flags (isChinese, isNorthindian, isSouthindian).
- getIngredientsDetail(): This method returns ingredientList of type String based on the ingredient flags.

3. Please refer to the screenshots below:

▼ Reference image

```
@Override
public void setIngredient(String ingredient) {
    if(ingredient.equals("Chinese")) this.isChinese = true;
}
```

▼ Reference image

```
@Override
public String getDishDetail() {
    if(isNorthindian) return "Curry";
}
```

```
@Override
public List<String> getIngredientsDetail(){
    if(isNorthIndian) return northIndianLentilsRecipes;
}
```

- Method `getDishDetail` and `getIngredientsDetail` will not return null.

4. In the `ApplicationContext.xml` file:

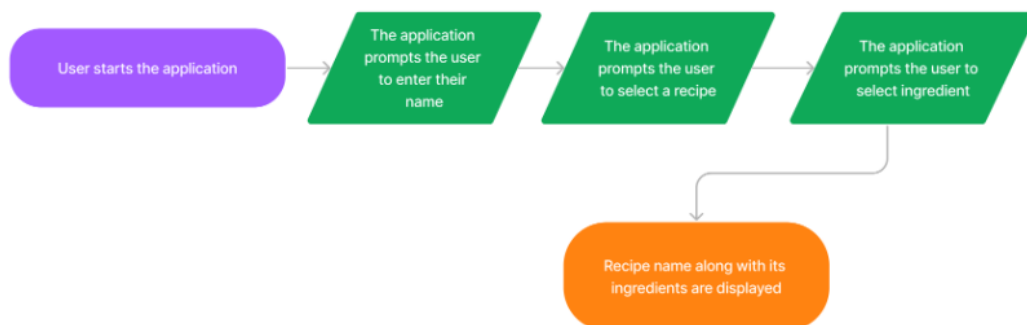
- Create beans of the ingredient types.
- Create beans for a different dish like Chinese etc.
- Create beans for different dishes. For example, Chinese Rice dishes, Chinese lentil dishes, etc.
- The file is located in "`src>main>resources`".

5. In the main application, get the user name, recipe, and ingredients from the console.

6. Get the required bean from the context, set the user's name, and display the recipe details.

7. Run and test the code.

#### Flow Chart:-



## Output:

Welcome to Tasty Trove Application

Enter your name?

*John*

Select Recipe:

1. North Indian
2. South Indian
3. Chinese

*3*

Select Ingredient:

1. Lentils
2. Rice
3. Wheat

*2*

Hello user John we suggest you to make Chinese Fried Rice you can use the following ingredients:

1. Steamed Rice
2. Ginger
3. Garlic
4. Soy Sauce
5. Vinegar