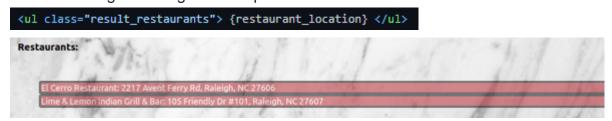
This document compares the updates to Recipe Recommender and how this version of Recipe Recommender improves the initial version of Recipe Recommender. There are various changes made to the initial version of Recipe Recommender which makes it different. The changes made are listed below:

Implemented restaurants recommendation system

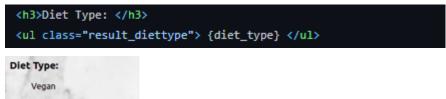
Restaurants along with its location are recommended to the users based on cuisine and ingredients given as input.



· Added vegetarian/vegan filters, etc.

All the recipes displayed to the users are categorized into diet-type: non-vegetarian, vegetarian and vegan.

Implemented this feature by checking the list of ingredients used in the recipes.



Added additional dataset to recommend restaurants as per the desired cuisine.

Added the database of restaurants containing fields (TranslatedRecipeName, TranslatedIngredients, TotalTimeInMins, TranslatedInstructions, URL, Cleaned-Ingredients, image-url, Recipe-rating, Diet-type, Restaurant, Restaurant-Location)

This database is used to provide restaurant recommendations based on the input (ingredients and cuisine) of the user.

```
_id: ObjectId("61a1d7a792946955df8a2c7c")

TranslatedRecipeName: "Spicy Tomato Rice (Recipe)"

TranslatedIngredients: " 2 teaspoon cashew - or peanuts, 1/2 Teaspoon mustard, 1 dry red chill..."

TotalTimeInMins: 15

Cuisine: "South Indian Recipes"

TranslatedInstructions: "To make tomato puliogere, first cut the tomatoes.

Now put in a mixer g..."

URL: "https://www.archanaskitchen.com/spicy-tomato-rice-recipe-in-hindi"

Cleaned-Ingredients: "tomato, salt, chickpea lentils, green chilli, rice, mustard, bc belle bhat p..."

image-url: "https://www.archanaskitchen.com/images/archanaskitchen/1-Author/b.yoja..."

Ingredient-count: 12

Recipe-rating: 2

Diet-type: "Vegan"

Restaurant: "Lime & Lemon Indian Grill & Bar"

Restaurant-Location: "105 Friendly Dr #101, Raleigh, NC 27607"
```

• Added filter for rating recipe.

Rating of the recipe is displayed that is fetched from the database.

```
<h3>Recipe Rating: </h3>
 {recipe_rating} 
Recipe Rating:
2
```

Dockerized the application.

Docker-compose.yml: This will call docker file from frontend and backend.

Back end docker file

```
FROM node:16

RUN apt-get update

RUN mkdir /home/ubuntu && mkdir /home/ubuntu/project

WORKDIR /home/ubuntu/project

RUN git clone https://github.com/het-pate199/Recipe_Recommender.git

WORKDIR /home/ubuntu/project/Recipe_Recommender/Code/backend/dao/

RUN sed -i 's/##gmail_password##/<INSERT_GMAIL_PWD>/g' mail_param.js

WORKDIR /home/ubuntu/project/Recipe_Recommender/Code/backend

RUN npm install -g n

RUN npm install nodemailer

RUN npm install

CMD ["npx", "nodemon"]
```

Front end docker file

```
FROM node:16

RUN apt-get update

RUN mkdir /home/ubuntu && mkdir /home/ubuntu/project

WORKDIR /home/ubuntu/project

RUN git clone https://github.com/het-pate199/Recipe_Recommender.git

WORKDIR /home/ubuntu/project/Recipe_Recommender/Code/frontend

RUN sed -i 's/##serverIp##/localhost:5000/g' src/apis/recipeDB.js

RUN npm install -g n

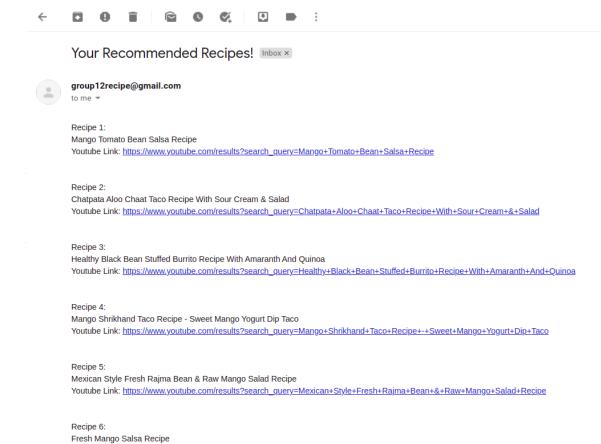
RUN npm install

CMD ["npm", "start"]
```

• Changed email format of the recipe suggestions.

Youtube links of each recipe recommended based on the input (cuisine and ingredients) is added in the email.

The mail is sent to the user only if the user opts for the option by selecting the checkbox.



Added cooking time filters.

Time to prepare the particular recipe is displayed along with the recipe.

Youtube Link: https://www.youtube.com/results?search_query=Fresh+Mango+Salsa+Recipe

```
<h3>Cooking Time (in Mins): </h3>
 {cooking_time} 
Cooking Time (in Mins):
10
```

 Fine tuned the existing code and wrapped it up to produce a finished product.

Refactored the code and added the filters (cooking time, recipe rating, diet-type, restaurant and its location, youtube link of each recipe). All the functionalities are found in the latest release of the software (v3.0.4)

