RECIPECOLLECTOR

A web application for crowdsourcing recipes from lay users.

Rameez Raja(MT21067), Devanshi Gupta(MT21024), Mahvash Fatima(MT21126)

Course Mini Project, Computational Gastronomy (BIO544), IIIT Delhi (Monsoon 2022)

Contents

1. Problem Definition/Motivation
2. Deliverables
3. Data Used
4. Implementation Details
5. Application Flow
6. Screenshots
7. Live Demo

Problem Definition

Food is indeed an important part of our lives .With food specific emerging sciences like computational gastronomy, structured data of food that we consume is needed to perform a detailed analysis of various aspects of the constituents of our aliment.We've come across many recipe databases in our day to day lives. However, these databases are hardly structured enough to do any kind of research which might need specific parts of the recipe like only the ingredients or the form of the ingredients etc.

This recipe crowdsourcing application, the RecipeCollector has been built with the aim to compile a structured database by collection of recipes from lay users by facilitating them in entering the data in a structured manner and expand the data for research purpose.This comes along with a multiple criteria based search functionality which makes recipe search easier for common people.

Deliverables

1. The web application is divided into two sections:
   a) **Add Recipe**: to crowdsource recipes from users
   b) **Search Recipe**: to search for crowdsourced recipes based on title, ingredient, process, or utensil.
2. Users can enter ingredient phrases followed by cooking instructions in the recipe submission section.
3. A single **ingredient phrase** will be gathered as a quadruple **{quantity, unit, ingredient name, and form}**
4. An **instruction** is collected as a quadruple **{process, ingredient, utensil, description}**
5. The recipe search section allows you to search crowdsourced recipes by title, ingredient, process, or utensil.

Data Used

Cubit Lists provided by **CoSyLab** which include:

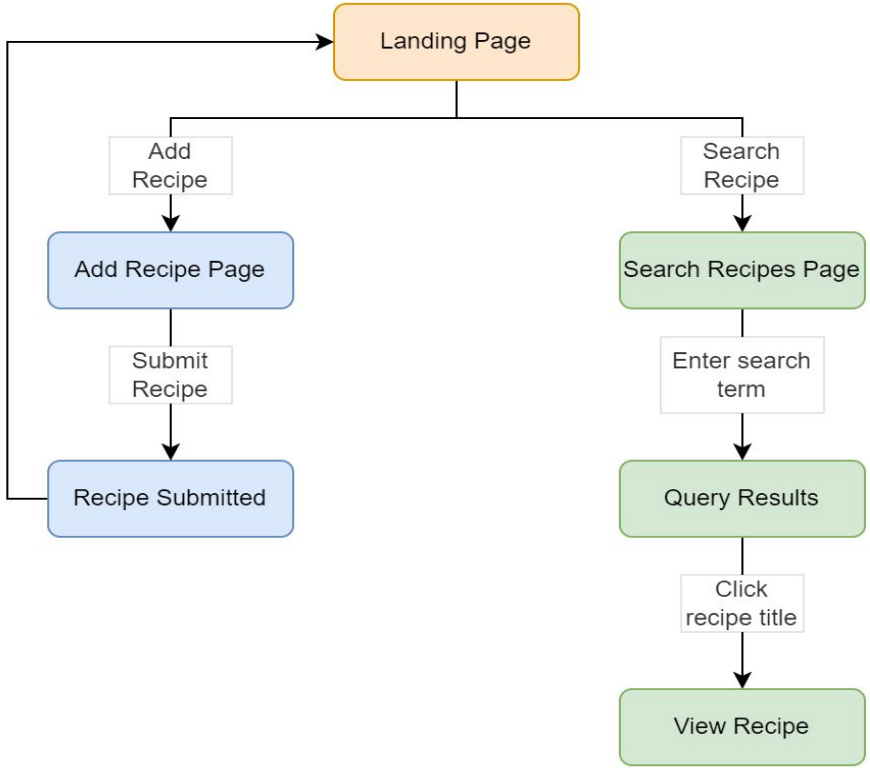
- Units,
- Ingredients,
- Forms,
- Processes, and
- Utensils

This data is fed into the database to be provided as options in the input fields.

Implementation Details

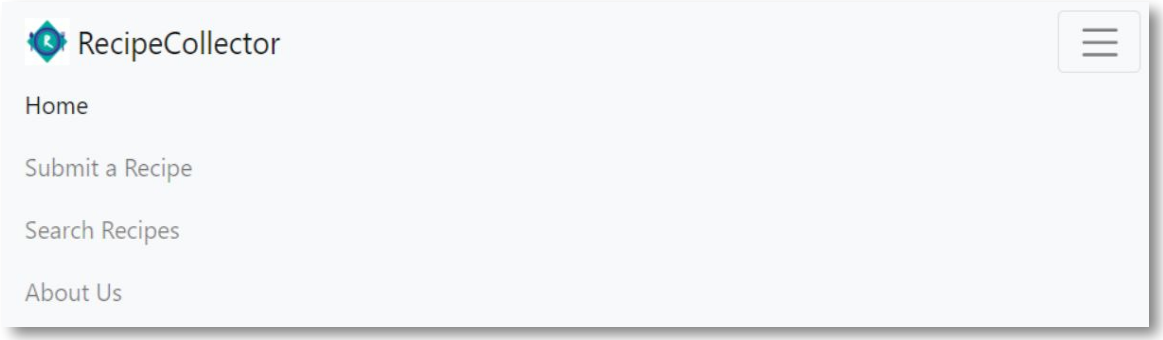
1. **Framework and Runtime**: We made an **ExpressJS**-based web application with **Node.js** runtime.
2. **UI**: The UI is implemented using **Embedded Javascript (ejs)** templates styled using **Bootstrap 4**.
3. **Database**: The data is stored and retrieved from a **MongoDB** database at the backend.
4. Our application flexible is compatible on all screens from mobiles to desktops.

Application Flow

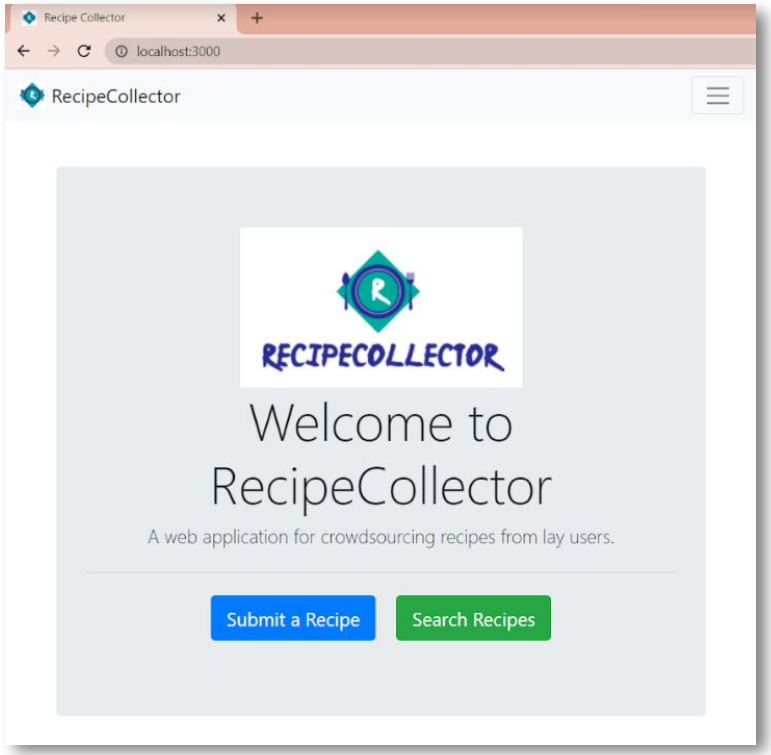


Screenshots

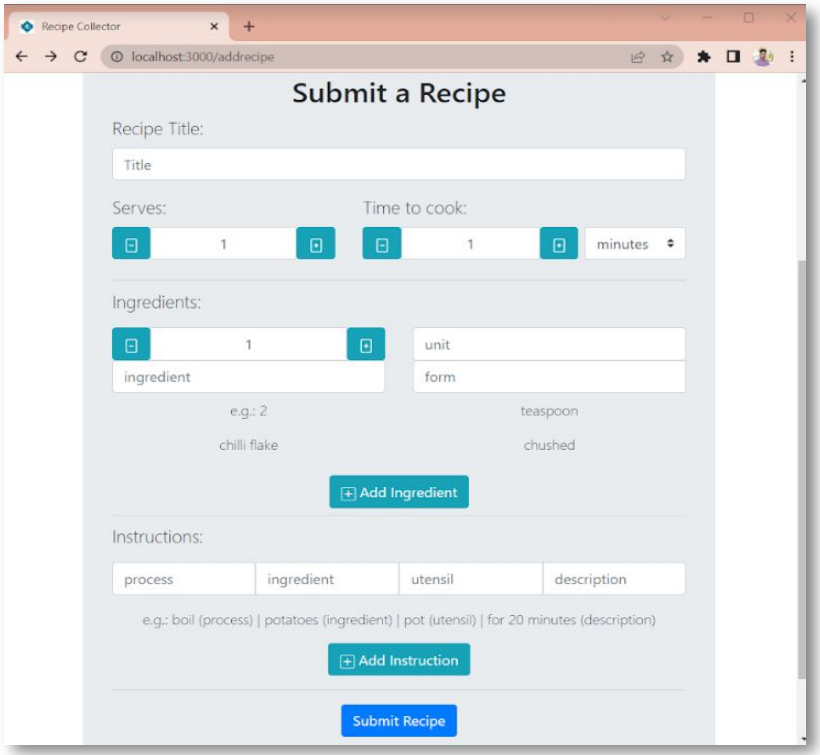
Navigation Bar



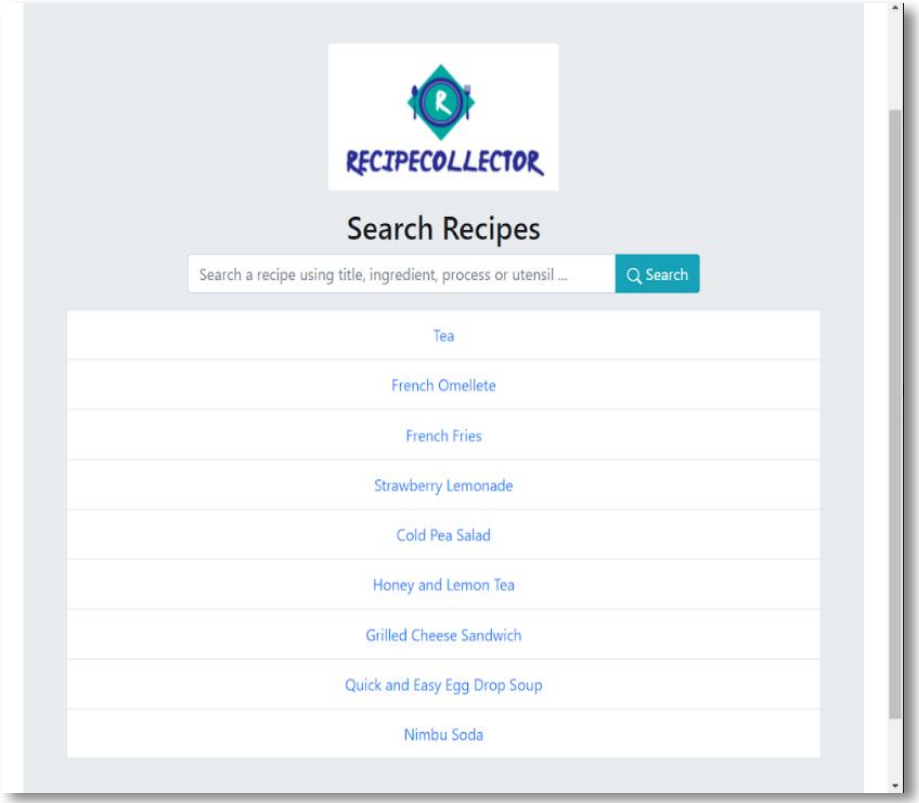
Landing Page



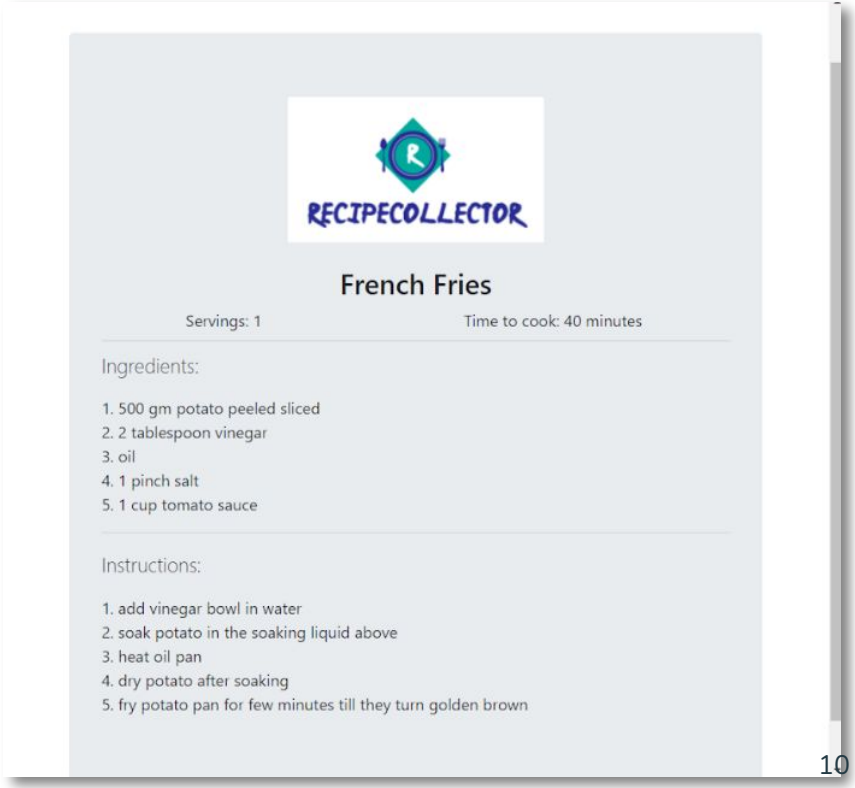
Recipe Submission page



Search Page



Recipe View



Future Work

- Ability to add multiple forms in a single ingredient phrase
- Ability to add multiple ingredients in a single instruction
- Search Filter based on whether the user wants query results to match exactly, start with or end with the search term
- Ability to sort the search results based on title, ingredient, process, or utensil

Live Demo

Thank you! :)