### **CAPSTONE PROJECT**

### INTERACTIVE RECIPE FINDER

#### **Presented By:**

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### **OUTLINE**

- Problem Statement
- System Development Approach
- Algorithm & Deployment
- Result
- Conclusion
- Future Scope
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### PROBLEM STATEMENT

- Users struggle to discover recipes with available ingredients.
- Existing solutions lack dynamic ingredient-based search and favorited recipes management.
- Need for a responsive, easy-to-use online tool for recipe discovery, viewing, and saving.



## SYSTEM APPROACH

#### **Technology Used:**

| Layer    | Technology                          |
|----------|-------------------------------------|
| Frontend | HTML, CSS,<br>JavaScript            |
| API      | Spoonacular API                     |
| Storage  | Local Storage                       |
| Hosting  | Python HTTP Server,<br>GitHub Pages |

#### **Design Approach**:

- HTML, CSS, JS are modular for easy updates.
- Responsive layout adapts to desktop and mobile.
- Modal popups for full recipe details.
- Action buttons: search, save, view, remove.
- Local Storage for favorites management.
- Visual hierarchy and clear navigation for usability.



## **ALGORITHM & DEPLOYMENT**

#### Product Catalog Creation:

The "catalog" consists of recipes categorized by user-input ingredients. Each recipe includes details such as recipe image, title, used and missing ingredients, preparation time, and instructions instead of price or product description.

#### Frontend Design:

The layout uses HTML and CSS featuring card-based design and grid layout to present recipe suggestions visually. This design ensures clarity and ease of navigation.

#### Interactive Features:

Instead of Add-to-Cart, the app allows users to "Save" favorite recipes using JavaScript that stores these in Local Storage. Filtering occurs based on searched ingredients, and modal views reveal full recipe details upon user request.

#### Testing:

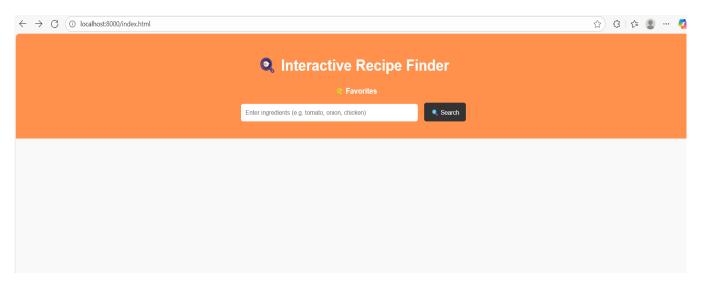
The UI is developed to be responsive, ensuring functionality across browsers and screen sizes from mobiles to desktop.

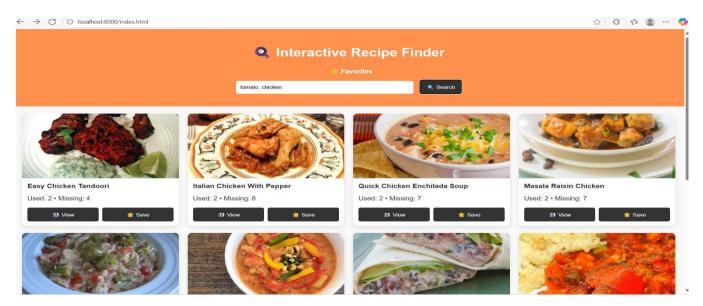
#### Deployment:

The project can be hosted using GitHub Pages or similar free static hosting platforms for easy access and sharing.



# RESULT

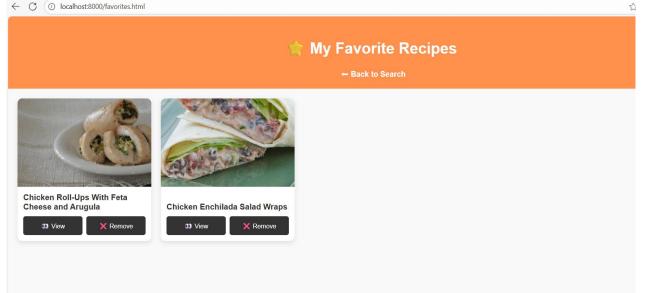






# **RESULT**







## **RESULT**

```
88 ~
★ File Edit Selection View Go Run Terminal Help ← ⇒

∠ RECIPE

                                                                                                                                                                   ţţ Ⅲ ...
                                         JS favorites.js
     V RECIPE ☐ ☐ ☐ ☐

    index.html >  html >  body >  footer >  p

     favorites.html
                              1 <!DOCTYPE html>
                              2 <html lang="en">
      JS favorites.js
                                    <meta charset="utf-8" />
      JS script.js
                                     <meta name="viewport" content="width=device-width,initial-scale=1" />
                                    <title>Interactive Recipe Finder</title>
                                    <link rel="stylesheet" href="style.css" />
                                      <h1> Interactive Recipe Finder</h1>
                                       <div class="search-container">
                                       <input id="ingredientInput" placeholder="Enter ingredients (e.g. tomato, onion, chicken)" />
                                        <button id="searchBtn">    Search/button>
                            PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
                                                                                                                                                                                    ≥ powershell
                            E:\RECIPE>git init
                                                                                                                                                                                   🗔 python
                            Initialized empty Git repository in E:/RECIPE/.git/
                                                                                                                                                                                    ≥ powershell
                            E:\RECIPE>python -m http.server 8000
                                                                                                                                                                                    ⊡ cmd
                            Serving HTTP on :: port 8000 (http://[::]:8000/) ...
::ffff:127.0.0.1 - - [19/Sep/2025 22:10:44] "GET /index.html HTTP/1.1" 200 -
                            ::1 - - [19/Sep/2025 22:10:44] "GET /style.css HTTP/1.1" 304
                            ::ffff:127.0.0.1 - - [19/Sep/2025 22:10:44] "GET /script.js HTTP/1.1" 304 -
                            ::1 - - [19/Sep/2025 22:12:24] "GET /favorites.html HTTP/1.1" 304 -
                            ::1 - - [19/Sep/2025 22:12:24] "GET /favorites.js HTTP/1.1" 304 -
                            ::1 - - [19/Sep/2025 22:12:24] code 404, message File not found
                            ::1 - - [19/Sep/2025 22:12:24] "GET /undefined HTTP/1.1" 404 -
```



## **GITHUB LINK**

https://github.com/arlene006/interactive-recipe-finder



### CONCLUSION

- Streamlined recipe discovery, viewing, and saving.
- Successful use of API, dynamic rendering, Local Storage, and responsive design patterns.



## **FUTURE SCOPE(OPTIONAL)**

- PDF recipe export.
- Filtering by dietary preferences.
- Ratings/reviews.
- Improved animations and UI effects.
- Voice ingredient input.
- Community/user recipe submissions.



### REFERENCES

- Cite Spoonacular API, JavaScript, HTML5/CSS3 docs.
- Acknowledge other recipe finder app studies and tech articles.



# **THANK YOU**

