

Recipe Haven: A Comprehensive Web Application for Recipe Management and Discovery

Mrs.Nitisha Tyagi 1 , Gargi Tyagi 2 , Harshita Thakur 3 , Anjali Sharma 4

1- Assistant Professor of computer Science & Engineering, Shri Ram Group of Colleges, Muzaffarnagar, India

2- B. Tech Scholar, Shri Ram Group of Colleges, Muzaffarnagar, India

3- B. Tech Scholar, Shri Ram Group of Colleges, Muzaffarnagar, India

4- B. Tech Scholar, Shri Ram Group of Colleges, Muzaffarnagar, India

Abstract:

Recipe Haven is a web-based application designed to facilitate the creation, management, and discovery of diverse recipes. Developed using ASP.NET Core MVC 7.0 and Entity Framework Core 7.0, the platform offers users the ability to add, edit, and delete recipes, complete with detailed ingredients and step-by-step instructions. The application features a responsive design, ensuring accessibility across various devices. This paper explores the system's architecture, user interface, and the technologies employed in its development.([GitHub][1])

Keywords: Recipe Management, Web Application, ASP.NET Core, Entity Framework, Responsive Design

Introduction:

In today's digital age, culinary enthusiasts seek platforms that provide easy access to a plethora of recipes. Recipe Haven addresses this need by offering a user-friendly interface for managing and discovering recipes. The application supports functionalities such as adding new recipes, editing existing ones, and deleting unwanted entries. Additionally, users can upload images to accompany their recipes, enhancing the visual appeal and clarity of instructions.

Problem Statement:

Despite the abundance of recipe websites, many lack comprehensive features that allow users to manage their culinary creations effectively. Users often encounter platforms that are either too simplistic or overly complex, leading to a suboptimal experience. Recipe Haven aims to bridge this gap by providing a balanced solution that combines ease of use with robust functionality.

Objectives:

- * To develop a web application that allows users to create, edit, and delete recipes.
- * To implement a responsive design ensuring accessibility across various devices.
- * To integrate a search functionality enabling users to find recipes quickly.
- * To provide a platform where users can upload images to accompany their recipes.([Hebbar's Kitchen][2])

System Architecture:

The architecture of Recipe Haven follows a Model-View-Controller (MVC) pattern, ensuring separation of concerns and scalability. The backend is powered by ASP.NET Core MVC 7.0, utilizing Entity Framework Core 7.0 for data management. SQL Server 2019 serves as the database, storing recipe

information, including titles, descriptions, ingredients, instructions, and image paths. The frontend is developed using Bootstrap 5.0, HTML5, and JavaScript, providing a responsive and intuitive user interface.([GitHub][1])

Technologies Used:

Backend Framework:

- * ASP.NET Core MVC 7.0
- * Entity Framework Core 7.0
- * SQL Server 2019([GitHub][1])

Frontend Technologies:

- * Bootstrap 5.0
- * HTML5
- * JavaScript([GitHub][1])

Development Tools:

- * Visual Studio 2022
- * Git for version control([GitHub][1])

Features

Recipe Management:

- * Users can create new recipes with detailed information.
- * Existing recipes can be edited or deleted.
- * Each recipe includes a title, description, ingredients, instructions, and an image.([GitHub][1])

Responsive Design:

- * The application features a clean, modern interface.
- * It is mobile-friendly and ensures intuitive navigation.([GitHub][1])

Search Functionality:

- * Users can quickly access recipes using the search feature.

Results and Discussion

Upon testing, Recipe Haven demonstrated efficient performance in managing recipes. The responsive design ensured seamless access across devices, and the search functionality proved effective in locating recipes swiftly. User feedback highlighted the application's ease of use and the value of the image upload feature in enhancing recipe clarity.

Conclusion

Recipe Haven successfully addresses the need for a comprehensive recipe management platform. By combining robust backend technologies with a user-friendly frontend, the application offers a valuable tool for culinary enthusiasts. Future enhancements may include features such as user authentication, recipe categorization, and social sharing capabilities. authentication, recipe categorization, and social sharing capabilities.

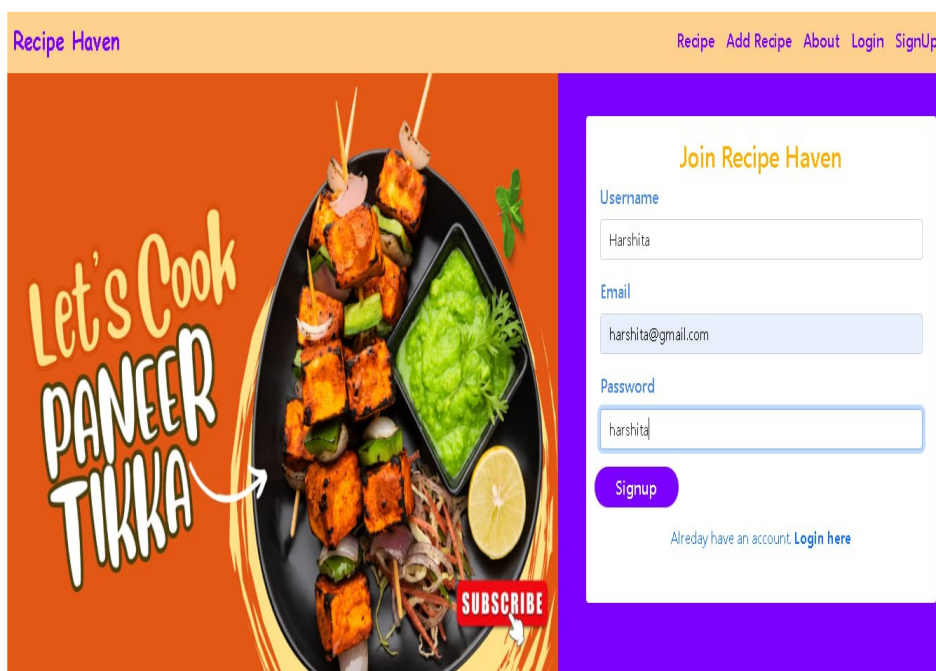
References

1. Dev22Patel. "Recipe-Haven." GitHub, 2025. <https://github.com/Dev22Patel/Recipe-Haven/>([GitHub][1])
2. "ASP.NET Core MVC 7.0." Microsoft Docs. <https://docs.microsoft.com/en-us/aspnet/core/mvc/>([GitHub][1])
3. "Entity Framework Core 7.0." Microsoft Docs. <https://docs.microsoft.com/en-us/ef/core/>([GitHub][1])
4. "SQL Server 2019." Microsoft Docs. <https://docs.microsoft.com/en-us/sql/sql-server/>([GitHub][1])
5. "Bootstrap 5.0." Bootstrap. <https://getbootstrap.com/>

Appendices:

Appendix A: System Screenshots

Homepage:



Recipe Creation Page:

Add New Recipe

Title
Besan Barfi

Description
Besan Padi is a classic Indian dessert made by roasting gram flour (besan) in ghee until aromatic and golden, then mixing it with sugar and cardamom for flavor. Once set, it is cut into small round or square shapes. It's simple, quick, and delightful!

Cooking time
45 minutes

Ingredients
1 cup besan (gram flour) ½ cup ghee ¼ cup powdered sugar ¼ tsp cardamom

Country of Recipe
indian

Category
sweets

Instructions
Garnish with chopped dry fruits if desired.
Let It Set:

Image
Choose File besan.jpeg

Add

Edit Your Recipe Details

Title
Besan Barfi

Description
Besan Padi is a classic Indian dessert made by roasting gram flour (besan) in ghee until aromatic and golden, then mixing it with sugar and cardamom for flavor. Once set, it is cut into small round or square shapes. It's simple, quick, and delightful!

Ingredients
1 cup besan (gram flour) ½ cup ghee ¼ cup powdered sugar ¼ tsp cardamo


Country of Recipe
indian

Category
sweets

Cooking time
45 minutes

Instructions
Roast the Besan:
Heat ghee in a pan on low flame.

Image
Choose File No file chosen

Original Recipe Image


Recipe Detail View:

Recipe Haven

[Recipe](#) [Add Recipe](#) [About](#) [Login](#) [SignUp](#)

Mexican Guacamole



Owned by: *John Dobby*

Description: A creamy, tangy dip made with ripe avocados, often served with tortilla chips or as a side.

Recipe Country: Mexico

Recipe Category: Appetizer

Cooking Time: 10 minutes

Ingredients:

- Avocados, ripe - 2 Lime juice - 1 tsp Tomato, diced - 1 Onion, finely chopped - 1 small Cilantro, chopped - 2 tsp Salt to taste Jalapeño, minced - optional, to taste

Instructions:

- Cut the avocados in half, remove the pits, and scoop out the flesh. Mash the avocados with lime juice. Stir in tomato, onion, cilantro, and jalapeño. Season with salt, mix, and serve with tortilla chips.

Appendix B: Code Snippets

Recipe Model (C#):

```
!DOCTYPE html>
html lang="en">
head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Recipe Haven</title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet">
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"></script>

  <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/@fortawesome/fontawesome-free@6.0.0/css/all.min.css" integrity="sha512-Kc323vGBEqzTmouAECnVceyQyqdsSiQlQISBL29aUWU/M7pSPA/gEUZQqv1cww40NycTxve5UMg5GT" crossorigin="anonymous">
  <link rel="stylesheet" href="/css/style.css">
  <link rel="stylesheet" href="/css/rating.css">
/head>
body>
  <nav class="navbar navbar-expand-lg navbar-light bg-light">
    <div class="container-fluid">
      <a class="navbar-brand" href="/" style="font-family: cursive; color:#7C00FF;font-size: 1.5rem;font-weight: 600;">Recipe Haven</a>
      <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarSupportedContent" aria-controls="navbarSupportedContent" aria-expanded="false" aria-label="Toggle navigation">
        <span class="navbar-toggler-icon"></span>
      </button>
      <div class="collapse navbar-collapse" id="navbarSupportedContent">
        <ul class="navbar-nav ms-auto mb-2 mb-lg-0">
          <li class="nav-item">
            <a class="nav-link active" aria-current="page" href="/listings">Recipe</a>
          </li>
          <li class="nav-item">
            <a class="nav-link active" href="/listings/new">Add Recipe</a>
          </li>
          <li class="nav-item">
            <a class="nav-link active" href="/listings/about">About</a>
          </li>
          <li class="nav-item">
            <a class="nav-link active" href="/login">Login</a>
          </li>
          <li class="nav-item">
            <a class="nav-link active" href="/signup">SignUp</a>
          </li>
        </ul>
      </div>
    </div>
  </nav>
```

Recipe Controller (C#):

```
body>
<div class="containers">
  <div class="slide">
    <div class="item" style="background-image: url(/images/samosa.png);">
      <div class="content">
        <div class="name">Samosa</div>
        <div class="description">A classic Indian snack, samosas are crispy, golden-brown pastries filled with a spiced mixture of potatoes, peas, and sometimes lentils. The filling combines mashe
        <button class="slidebtn">See More</button>
      </div>
    </div>
    <div class="item" style="background-image: url(/images/image.png);">
      <div class="content">
        <div class="name">Biryani</div>
        <div class="description">Chicken Biryani is a fragrant, flavorful rice dish that combines tender, marinated chicken with basmati rice, aromatic spices, and herbs. The chicken is marinated
        <button class="slidebtn">See More</button>
      </div>
    </div>
    <div class="item" style="background-image: url(/images/roll.png);">
      <div class="content">
        <div class="name">Chowmein Roll</div>
        <div class="description">A fusion favorite, the Chowmein Roll wraps spicy stir-fried noodles in a soft or crispy paratha, creating a handheld snack bursting with flavor. The noodles are to
        <button class="slidebtn">See More</button>
      </div>
    </div>
    <div class="item" style="background-image: url(/images/rice.png);">
      <div class="content">
        <div class="name">Daal Rice</div>
        <div class="description">Daal Rice, or Dal Chawal, is a comforting, everyday Indian dish featuring simple yet flavorful lentil curry served over steamed rice. The dal (usually yellow lenti
        <button class="slidebtn">See More</button>
      </div>
    </div>
    <div class="item" style="background-image: url(/images/rasgulla.png);">
      <div class="content">
        <div class="name">Gulab Jamun</div>
        <div class="description">Gulab Jamun is a beloved Indian dessert made from deep-fried milk solids, traditionally khoya or milk powder, mixed with a touch of flour and shaped into soft doug
        <button class="slidebtn">See More</button>
      </div>
    </div>
  </div>
</div>
```

[1]: https://github.com/Dev22Patel/Recipe-Haven/?utm_source=chatgpt.com "GitHub - Dev22Patel/Recipe-Haven"