

BiteBook

Cook, Share, Inspire — Your Culinary Community Awaits

Overview

BiteBook is a full-stack web application designed to empower users to discover, share, and manage culinary recipes in a community-driven environment. Built with a React frontend and a Node.js backend, it offers a seamless experience for recipe exploration and collaboration.

Why BiteBook?

This project streamlines recipe sharing and management with a focus on security, scalability, and user engagement. The core features include:

- React & Vite Integration: Rapid frontend development with hot module replacement and streamlined UI components.
- Secure Authentication: Role-based access control and JWT-based user sessions ensure data protection.
- API-Driven Data Management: Robust CRUD operations for recipes and users facilitate dynamic content handling.
- Modular Architecture: Clear separation of frontend and backend layers for maintainability and scalability.
- Community Focus: Designed to foster collaboration and culinary exchange among users.

API Reference

Below are the main API endpoints for BiteBook's backend. Each endpoint is briefly described for quick reference.

GET /recipes/

Fetch a paginated list of all recipes.

Query Parameters:

page (optional): Page number (default: 1)

• limit (optional): Number of recipes per page (default: 10)

GET /recipes/search

Search for recipes by dish name (case-insensitive, partial matches allowed). Query Parameters:

• q (required): The dish name to search for.

GET /recipes/my

Retrieve all recipes created by the authenticated user.

Headers:

• Authorization: Bearer <JWT>

POST /recipes/

Create a new recipe.

Headers:

- Authorization: Bearer <JWT> Body:
- dishName (string, required)
- timeTaken (string/number, required)
- ingredients (array or comma-separated string, required)
- process (array or comma-separated string, required)

PATCH /recipes/:id

Update an existing recipe by its ID. Only provided fields will be updated. Headers:

- Authorization: Bearer <JWT> Body:
- Any of: dishName, timeTaken, ingredients, process

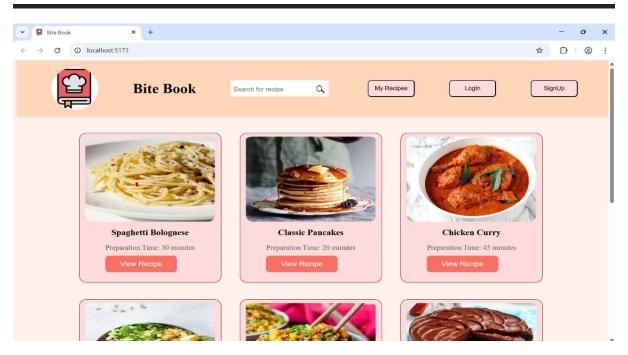
DELETE /recipes/:id

Delete a recipe by its ID.

Headers:

• Authorization: Bearer <JWT>

Homepage

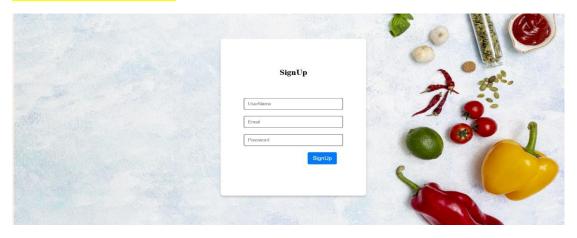


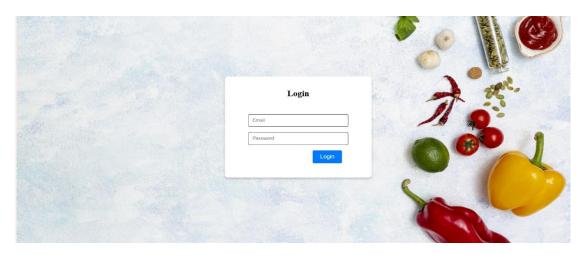
The BiteBook homepage welcomes users with a visually engaging feed of the latest and most popular recipes shared by the community. Key features of the homepage include:

- Recipe Feed: Displays recipe cards with images, dish names, preparation times allowing users to quickly browse and discover new recipes.
- Search Bar: Prominently placed at the top, enabling users to search for recipes by name.
- Navigation Menu: Easy access to login, signup, user dashboard, and other core sections.
- Responsive Design: The layout adapts seamlessly to both desktop and mobile devices, ensuring a smooth user experience for everyone.
- Call to Action: Encourages visitors to join the community by signing up or sharing their own recipes.

This homepage serves as the gateway to BiteBook's vibrant culinary community, making it easy for users to explore and get inspired right from the start.

Signup & Login Pages





BiteBook provides secure and user-friendly authentication screens for both new and returning users:

• Signup Page:

Allows new users to create an account by providing essential details such as username, email, and password. Passwords are securely hashed using bcrypt, and the process is protected by validation to ensure data integrity.

Login Page:

Enables registered users to log in with their credentials. Upon successful authentication, a JWT token is issued for secure, stateless session management. Middleware ensures that only authenticated users can access protected routes and features.

Both pages are designed for clarity and ease of use, with clear form fields, validation feedback, and responsive layouts for all devices.

Recipe Card & Detail View



When a user presses the View Recipe button on a recipe card, they are taken to a detailed view showcasing all the information about the selected recipe:

- Recipe Image and Title: A large, attractive image of the dish along with its name.
- Time Taken: Information about the preparation time.
- Ingredients List: Clearly presented, often as a checklist or bullet points for easy reference.
- Step-by-Step Process: Detailed instructions to help users to create the recipe.
- Responsive Layout: The detail view adapts to both desktop and mobile screens for optimal readability and interaction.

This immersive detail page ensures users have all the information they need to successfully recreate the recipe, while also enabling community interaction and content management.

User Dashboard ("My Recipes")



When a user presses the My Recipes button, they are taken to their personal dashboard. This section provides a centralized view and management panel for all recipes created by the user.

Key features of the User Dashboard:

- Recipe List: Displays all recipes authored by the user, each with options to view, edit, or delete.
- Quick Actions: Buttons or icons for editing and deleting recipes directly from the dashboard.
- Create New Recipe: Prominent button to add a new recipe, streamlining the content creation process.
- Responsive Layout: Ensures usability and accessibility on both desktop and mobile devices.

The dashboard empowers users to efficiently manage their culinary contributions and maintain their personal collection on BiteBook.

Creating a Recipe

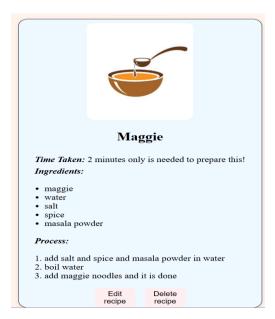


Create Your Favourite Recipe Maggie 2mins Maggie Packet , water On the stove , Pour glass of water , Put the masala and put the maggie and Save Cancel

When a user clicks the Create Recipe button, they are taken to a dedicated form where they can add a new recipe to BiteBook.

Key features of the Create Recipe page:

- Recipe Name: Input field for the dish name.
- Preparation Time: Specify the time required to make the dish.
- Ingredients: Add ingredients as a list or by entering them as commaseparated values.
- Process/Steps: Enter the cooking process as step-by-step instructions, either as a list or in separate fields for clarity.
- Submit Button: Saves the new recipe to the user's collection and makes it visible to the community.



This intuitive and streamlined form makes it easy for users to contribute their favorite recipes, ensuring every submission is complete and well-structured.

Database Structure

The BiteBook application uses MongoDB to store all user and recipe data. The database consists of two main collections: users and recipes.

1. Users Collection

Each document in the users collection represents a registered user of the platform.

Schema Fields:

- username (String, required, unique): The user's display name.
- email (String, required, unique): The user's email address.
- password (String, required): The user's (hashed) password.
- createdAt (Date, default: current date): The date the account was created.
- role (String, enum: ['admin', 'user'], default: 'user'): User role for access control.

2. Recipes Collection

Each document in the recipes collection represents a recipe created by a user.

Schema Fields:

- dishName (String, required): The name of the dish.
- timeTaken (String, required): Preparation/cooking time.
- ingredients (Array of Strings, required): List of ingredients.
- process (Array of Strings, required): Step-by-step cooking instructions.
- userID (ObjectId, required, references users): The ID of the user who created the recipe.

GITHUB REPOSITORY LINK: BitBook GitHub Repository

DEPLOYED VERCEL LINK: BiteBook

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