

Review-4 on ZeroWasteChef



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Overview

- Introduction
- Objectives of the Project
- Proposed Methodology/Architecture/Algorithm/Technique/etc
- Implementation Details
- Results (If any one objective is completed)
- References

Introduction



- A sustainable cooking platform called "Waste Chef" focused on reducing food waste
- Innovative recipe recommendation system based on available ingredients
- Smart ingredient matching to prevent food waste
- User-friendly interface with modern design principles
- Real-time recipe suggestions and customization options

Objectives of the Project



- Primary Objective:
 - Develop a web platform that reduces household food waste by suggesting recipes based on available ingredients
- Secondary Objectives:
 - Create an intuitive ingredient search and matching system
 - Implement user authentication for personalized recipe tracking
 - Design a responsive and accessible interface
 - Establish a scalable architecture for future enhancements

Proposed Methodology/Architecture/Algorithm/Technique/etc



Client Layer:

- React Frontend
- TypeScript
- TailwindCSS UI

API Layer:

- RESTful APIs
- JWT Authentication
- Request/Response handling

Server Layer:

- Node.js/Express Backend
- Business Logic
- Recipe Matching Algorithm

Data Layer:

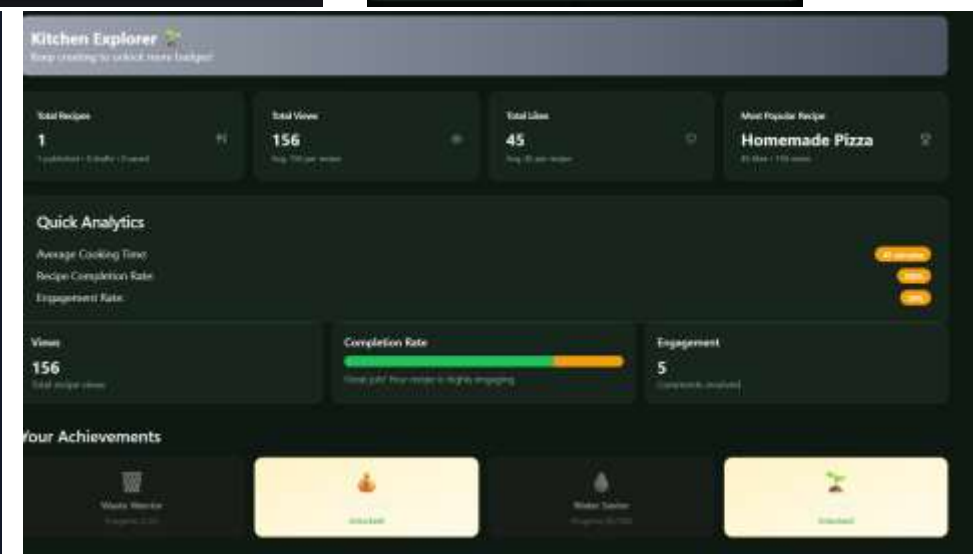
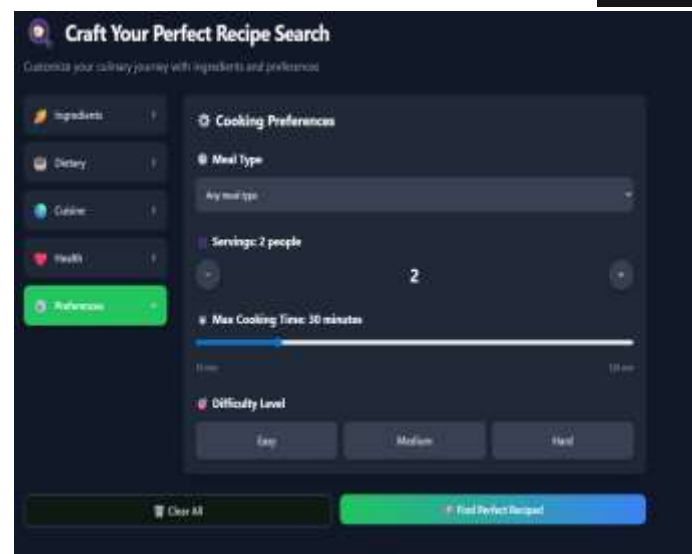
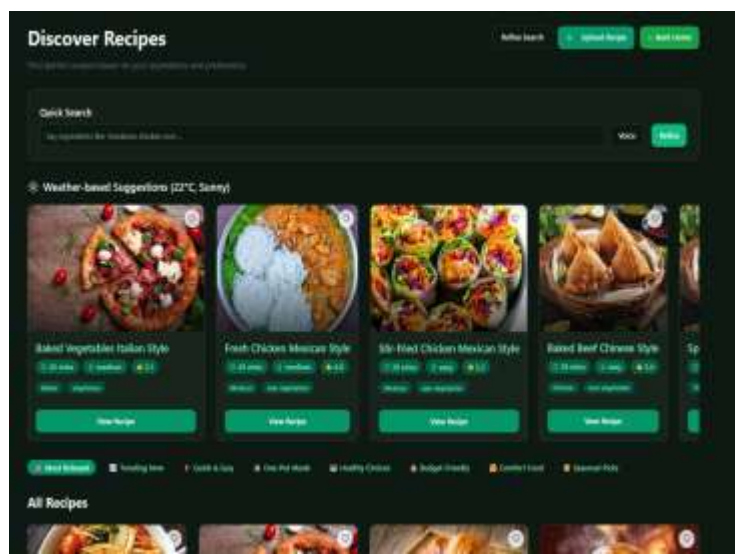
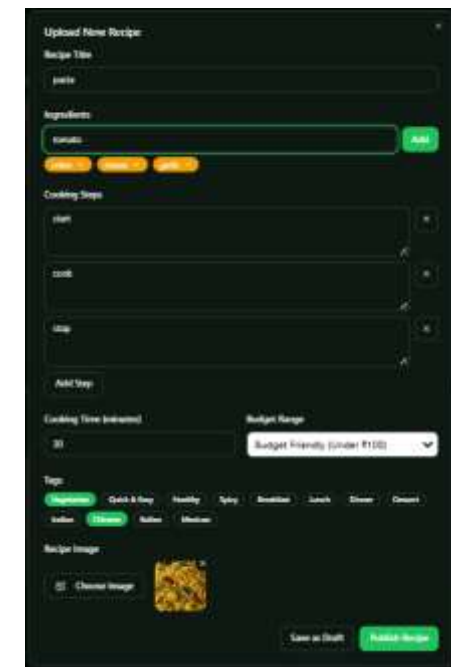
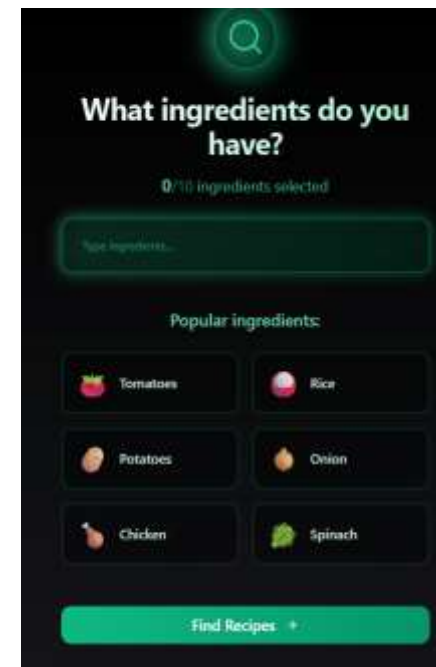
- PostgreSQL Database
- Prisma ORM
- Data Models

Implementation Details



- Frontend Implementation:
 - React 18+ with TypeScript
 - Component-based architecture
 - Responsive design with TailwindCSS
 - State management with Context API
- Backend Implementation:
 - Node.js/Express server
 - RESTful API endpoints
 - Prisma for database operations
 - JWT-based authentication
- Key Features Implemented:
 - User authentication system
 - Recipe search functionality
 - Ingredient matching algorithm
 - Profile management
- Development Tools:
 - Version Control: Git
 - IDE: VS Code
 - Full Stack Deployment: Render
 - Frontend static hosting
 - Backend service
 - PostgreSQL database

Results



References

- React Official Documentation
<https://react.dev/>
- Tailwind CSS Documentation
<https://tailwindcss.com/docs>
- Node.js Documentation
<https://nodejs.org/docs/>
- Prisma Documentation
<https://www.prisma.io/docs>
- PostgreSQL Documentation
<https://www.postgresql.org/docs/>
- Render Deployment Documentation
<https://render.com/docs>
- TypeScript Documentation
<https://www.typescriptlang.org/docs/>
- Express.js Documentation
<https://expressjs.com/>

Thank you and Any Queries