

NutriLens – AI Health & Nutrition Assistant

Team ID: TM180

Team Name: BitByBit

NutriLens is an AI-powered web application designed to help users make informed food and medicine choices through image-based and text-based analysis. With the power of Google Gemini AI, Next.js, and Neon Database, NutriLens scans ingredients or medicine labels, provides nutritional insights, health ratings, and personalized recommendations — all in a simple, user-friendly dashboard.

Tech Stack

Frontend: Next.js 15 (App Router, React 19)

Backend: Next.js API Routes (Node.js Runtime)

Database: NeonDB (PostgreSQL + Prisma ORM)

Auth: Firebase Authentication (Google Sign-In + Email)

AI Model: Google Gemini API (Generative AI)

Styling: Tailwind CSS + Shadcn UI

Deployment: Vercel

Language: TypeScript

Features Overview

- User Authentication with Firebase (Google Sign-In + Email)
- Profile Setup with health and lifestyle preferences
- AI-Powered Food Label Analysis using Gemini
- Medicine Scanner and Health Compatibility Checker
- Symptom Checker for probable conditions
- Personalized Health Tips
- History Dashboard with Prisma & NeonDB
- Dark/Light Theme Support
- Ready for Multilingual support (Hindi, Gujarati)

Installation & Setup

- ❶ Clone the repository:

```
git clone https://github.com/NandCode24/nutrilens.git
```

```
cd nutrilens
```
- ❷ Install dependencies:

```
npm install
```
- ❸ Setup environment variables (.env file):

```
DATABASE_URL=your_neon_db_url
```

```
GEMINI_API_KEY=your_gemini_api_key
```

```
FIREBASE_API_KEY=your_firebase_api_key
```

```
NEXTAUTH_URL=http://localhost:3000
```
- ❹ Generate Prisma Client:

```
npx prisma generate
```
- ❺ Push Database Schema:

```
npx prisma db push
```
- ❻ Run locally:

```
npm run dev
```

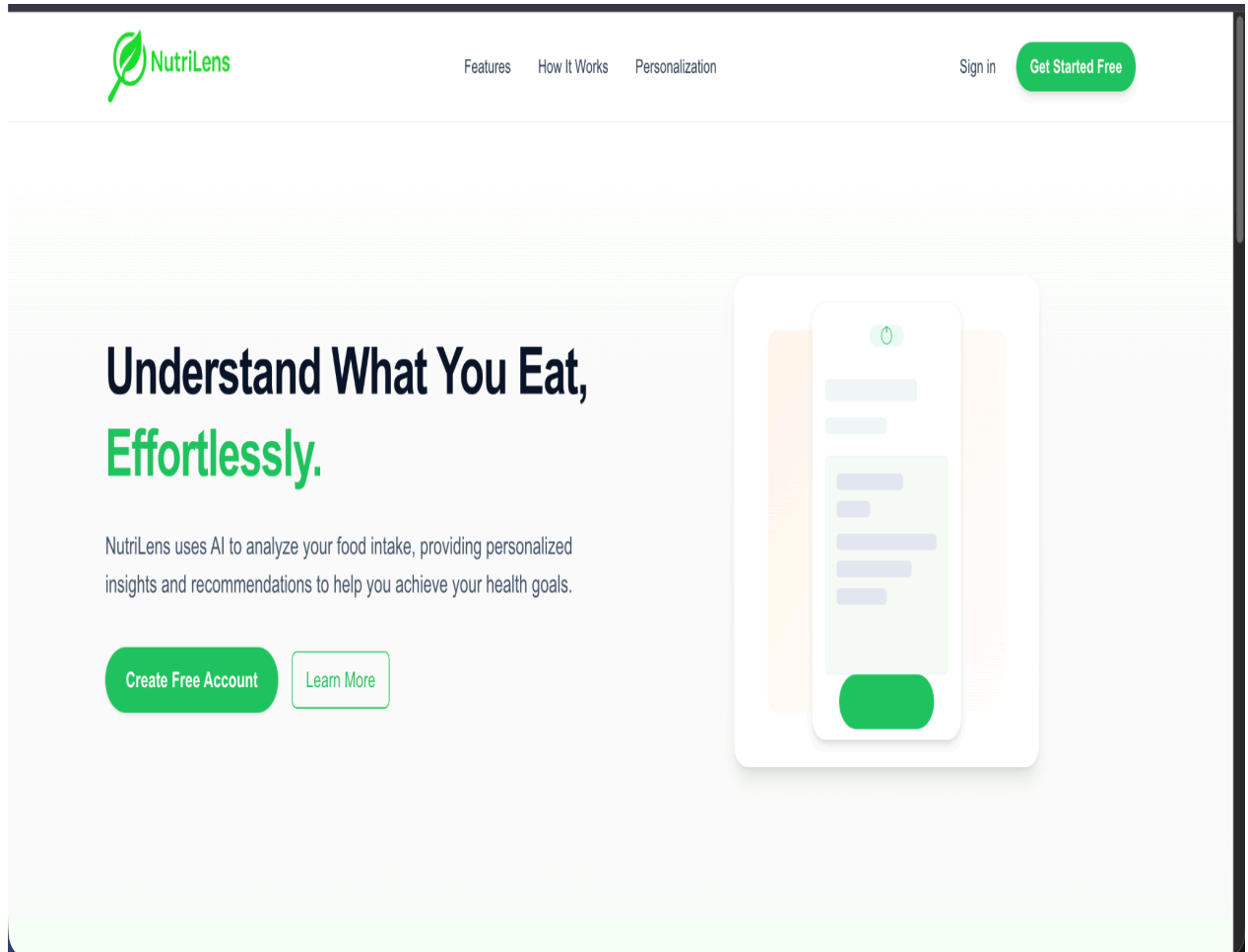
App runs on: <http://localhost:3000>

Deployment (Vercel)

1. Push code to GitHub
2. Import repo on Vercel
3. Add environment variables in Vercel dashboard
4. Deploy
5. Update NEXTAUTH_URL with deployed URL

Output Screenshots

Below are placeholders for inserting screenshots of the project UI and outputs:



Create an Account

Start your journey with NutriLens

Sign Up

Or continue with



Already have an account? [Login](#)

Welcome Back

Sign in to continue your NutriLens journey

Sign In

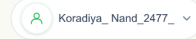
Or continue with



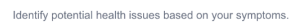
Don't have an account? [Create one](#)

This helps us provide personalized diet plans and recommendations.

Basal Metabolic Rate (BMR)
1809 kcal / day
This is an estimate of the calories you burn at rest.



Quickly analyze food labels for nutritional information.





Daily Health Tips

💧 Drink at least 8 glasses of water daily to stay hydrated and flush out toxins.

Next Tip →

Symptom Checker

Describe your symptoms to discover possible conditions.

🔍 Enter your symptoms, e.g., 'sore throat, fever'

Headache

Fatigue

Nausea

Dizziness

Submit

⚠️ This tool does not provide medical advice. It is for informational purposes only and should not replace consultation with a licensed healthcare professional.

Symptom Checker

Describe your symptoms to discover possible conditions.

Headache Fatigue Nausea Dizziness

Submit

Delayed Onset Muscle Soreness (DOMS)

Self-care


Muscle soreness and stiffness that typically develops 12-48 hours after unaccustomed or intense physical activity, especially strength training like 'leg day'. It's caused by microscopic damage to muscle fibers.

High confidence (95%)

Advice: Rest and allow your muscles to recover. Gentle stretching, light activity (like walking), warm baths or showers, and over-the-counter pain relievers (like ibuprofen or acetaminophen) can help manage discomfort. Ensure adequate hydration and nutrition.

Warning: If pain is severe and debilitating, accompanied by significant swelling, redness, warmth, or extends beyond a few days without improvement. Seek medical attention if you experience very dark urine (tea-colored) as this could indicate rhabdomyolysis, a more serious condition.

Save Share

 This tool does not provide medical advice. It is for informational purposes only and should not replace consultation with a licensed healthcare professional.

Scan or Search Medicine Label

Upload the medicine label or search manually for details and safety insights.



Tap to capture

Scan Now

OR



Scan or Search Medicine Label

Upload the medicine label or search manually for details and safety insights.



Scan Now

OR

Enter medicine name



Medicine Analysis Result

Medicine Name: ViscoFer™

Active Ingredients: Ferrous Ascorbate (equivalent to elemental iron 100 mg), Mecobalamin 1500 mcg, Folic Acid I.P. 1.1 mg, Zinc Sulphate Monohydrate I.P. (equivalent to elemental Zinc 22.5 mg)**Uses:** A therapeutic supplement containing iron, Mecobalamin (Vitamin B12), Folic Acid (Vitamin B9), and Zinc, typically used to address deficiencies of these nutrients, such as iron deficiency anemia and related conditions.**Side Effects:** None listed**Precautions:** Dosage: As directed by the Physician., Storage: Store in a cool, dry and dark place., Keep the medicine out of reach of children.**Health Compatibility:** 6.8**Reasoning:** ViscoFer™ contains essential micronutrients (iron, B12, folic acid, zinc) vital for various bodily functions and overall health. However, it is explicitly stated 'FOR THERAPEUTIC USE' and 'As directed by the Physician,' suggesting it's intended for specific deficiencies or medical conditions rather than general daily supplementation. Taking iron supplements without a diagnosed deficiency can lead to adverse effects.**Recommendation:** For general wellness, it's advisable to consult a healthcare professional before starting ViscoFer™. A doctor can assess your nutritional status through tests to determine if you have any deficiencies (e.g., iron, B12, folic acid, zinc) that would warrant the use of this specific supplement. If no deficiencies are present, a balanced diet and a general multivitamin (if needed) might be more appropriate for overall wellness.

History

View your scanned ingredient and medicine logs.

Milk Solids

Ingredient

This chocolate milk contains 122.7 kcal per 150ml serving. It provides 6.1% of the recommended daily allowance.

Scanned: 1 day ago



Thyronorm 112MCG

Medicine

Thyronorm (Levothyroxine) is a synthetic thyroid hormone used to treat hypothyroidism (underactive thyroid gland), a condition...

Scanned: 1 day ago



Carbonated treated water

Ingredient

This carbonated beverage contains sugar and sodium chloride. The nutrition information per 100ml is: Energy 42.5 kcal,...

Scanned: 1 day ago



Potato (87%)

Ingredient

This product is high in carbohydrates and total fat, with a moderate amount of dietary fiber. It contains added sugars and...

Scanned: 1 day ago



My Profile

Manage your personal information and health details.



Koradiya_Nand_2477_
koradiyanand2477@gmail.com

Edit Profile

Personal Details

NAME	AGE
Koradiya_Nand_2477_	18
GENDER	HEIGHT
Male	175 cm
WEIGHT	BMI
80 kg	26.1
BASAL METABOLIC RATE (BMR)	
1955 kcal	

Health & Lifestyle Info

DIEY TYPE	HEALTH GOALS
Balanced	Weight Loss
MEDICAL HISTORY	ALLERGIES
Hypothyroidism	None

App Preferences

Notifications	<input checked="" type="checkbox"/>
Dark Mode	<input type="checkbox"/>

✨ Future Enhancements

- Multi-language support (Hindi, Gujarati)
- Nutrition tracking over time
- AI meal planning and fitness recommendations
- In-app chatbot for user interaction
- Mobile App (React Native)

👤 Team Information

Team ID: TM180

Team Name: BitByBit

Members:

1. Rudra Viroja
2. Koradiya Nand
3. Prasham Padiya