

Vitality – AI-Powered Health & Fitness

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Abstract

Vitality is a web-based application designed to assist users in achieving their health and fitness goals through AI-driven recommendations and tracking. The platform offers personalized workout plans, nutrition guidance, and progress monitoring, catering to individual user needs. Developed using modern web technologies, Vitality aims to provide an intuitive and engaging user experience.

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Introduction

The increasing awareness of health and fitness has led to a demand for personalized solutions. Vitality addresses this demand by leveraging AI to provide customized fitness and nutrition plans.

Objectives

- Develop a user-friendly web application for health and fitness guidance.
- Implement AI algorithms to generate personalized workout and nutrition plans.
- Enable users to track their progress over time.
- Ensure responsive design for accessibility across various devices.

System Analysis

Vitality replaces traditional, non-personalized fitness guidance by offering a tailored, AI-powered solution accessible through web browsers.

System Design

Vitality is developed using the MERN stack. Key modules include User Authentication, Profile Management, AI Recommendation Engine, and Progress Tracking.

Implementation

The platform utilizes React.js for the frontend, Node.js and Express.js for the backend, and MongoDB for data storage. Machine learning algorithms generate personalized advice.

Testing

Unit, integration, and user acceptance tests were performed to ensure correct functionality and usability.

Results and Discussion

Testing showed that Vitality provides helpful, personalized fitness plans. Feedback suggested improvements like more workout variety and social features.

Conclusion

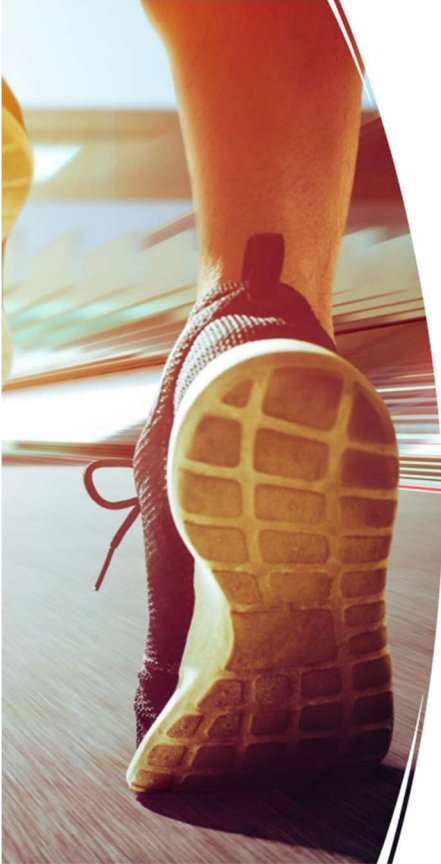
Vitality proves that AI can effectively deliver personalized health and fitness guidance. The application is accessible and adapts to user needs.

Future Work

- Integrate wearable device data for real-time updates.
- Expand the AI engine to include mental wellness features.
- Create a mobile app version.
- Add community and social features.

References

- React.js Documentation - <https://reactjs.org/docs/getting-started.html>
- Node.js Documentation - <https://nodejs.org/en/docs/>
- MongoDB Documentation - <https://docs.mongodb.com/>
- Express.js Documentation - <https://expressjs.com/en/starter/installing.html>
- AI in Health and Fitness - [Relevant academic articles]

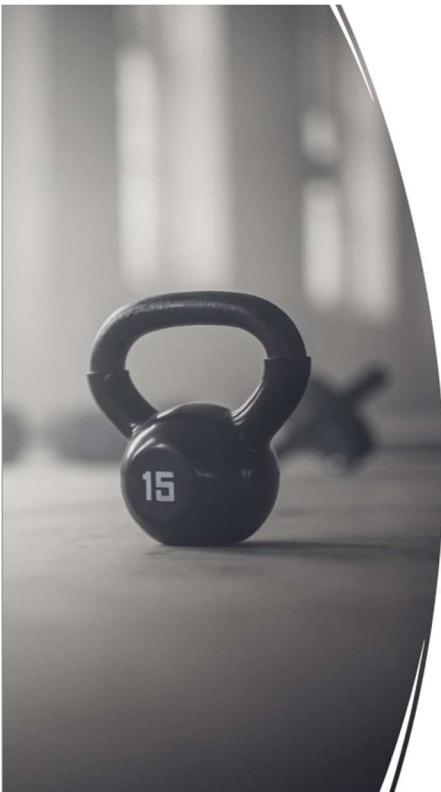


Vitality – AI-Powered Fitness Assistant

Your Personalized Fitness Guide

Creators: Divayam, Saksham, Vaibhav, Aayush

<https://vitality-roan.vercel.app/>



Introduction

- What is Vitality?
 - Smart fitness platform with an AI chatbot.
 - Recommends workout videos based on user goals.
- Why Vitality?
 - Solves the problem of finding the right workout.

Problem Statement



Challenges in Fitness:



- Too much generic content.



- Difficult to find goal-specific workouts.



- Lack of personalization.



Vitality solves this with AI-driven recommendations.

Our Solution

- • AI Chatbot identifies fitness goals.
- • Recommends strength, cardio, yoga videos.
- • User-friendly, interactive interface.

Key Features



- AI-Powered Chatbot



- Goal-Based Workouts

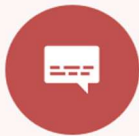


- Curated Video Library



- Easy Navigation

Technology Stack



FRONTEND:
REACT.JS, TAILWIND
CSS



BACKEND: NODE.JS
(IF APPLICABLE)

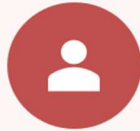


AI: OPENAI API / NLP



HOSTING: VERCEL

How It Works?



1. USER OPENS WEBSITE



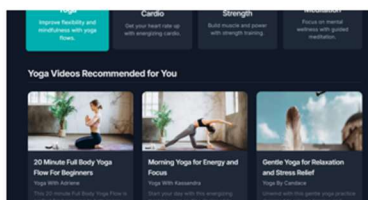
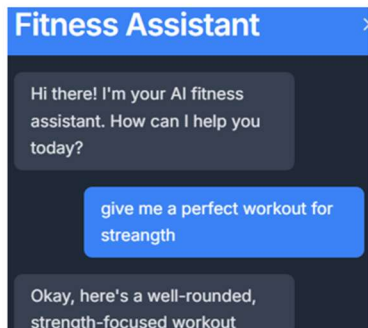
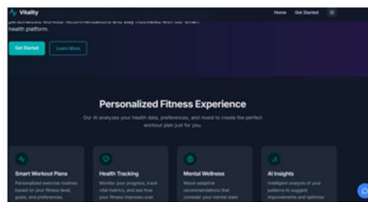
2. CHATBOT ASKS ABOUT GOALS



3. SYSTEM RECOMMENDS VIDEOS



4. USER STARTS WORKOUT!



Demo Screenshots

- homepage
- Chatbot Interaction
- Workout Video Recommendations

Target Audience

- Fitness Beginners
- Gym Enthusiasts
- Yoga & Cardio Lovers

Competitive Advantage

- Personalized AI vs. generic content
- Engaging UI vs. complex apps
- Free & accessible vs. paywalled apps



Business Model

- Freemium model (free + premium)
- Ads and brand partnerships



Future Enhancements



- User Accounts



- Workout Tracking



- Mobile App

Meet the Team

Divayam, Saksham, Vaibhav, Aayush

Roles:

Divayam :web design

Saksham:chat bot

Call to
Action

- Try Vitality Now!
- Visit: <https://vitality-roan.vercel.app/>
- Feedback Welcome!



Thank You!

Get Fit with
Vitality!

