
CAPSTONE PROJECT

NUTRIFIT AI AGENT

Presented By:

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OUTLINE

- Problem Statement
- Technology used
- Wow factor
- End users
- Result
- Conclusion
- Git-hub Link
- Future scope
- IBM Certifications

PROBLEM STATEMENT

In today's fast-paced world, many individuals struggle to maintain a healthy lifestyle due to lack of personalized guidance, time constraints, and inconsistent motivation. Traditional fitness solutions often require expensive subscriptions, in-person consultations, or rigid schedules that don't adapt to personal preferences or daily routines.

Proposed Solution:

NutriFit AI Agent, powered by IBM Cloud Lite and IBM Granity, provides personalized workouts, simple nutrition tips, and daily motivation—anytime, anywhere—helping users build lasting healthy habits in an accessible and affordable way.

TECHNOLOGY USED

IBM cloud lite services

Natural Language Processing (NLP)

Retrieval Augmented Generation (RAG)

IBM Granite model

IBM CLOUD SERVICES USED

- IBM Cloud Watsonx AI Studio
- IBM Cloud Watsonx AI runtime
- IBM Cloud Agent Lab
- IBM Granite foundation model

WOW FACTORS

- NutriFit AI Agent will revolutionize fitness and wellness by providing instant, personalized guidance. It eliminates the guesswork from workouts and nutrition, helping users stay consistent and motivated while making healthy living accessible and adaptable to any lifestyle.
- It offers AI-personalized workouts tailored to user goals, fitness levels, and available equipment or time, ensuring each session is effective and achievable.
- Smart meal suggestions provide quick, healthy recipes and snack ideas based on dietary preferences, helping users maintain balanced nutrition without spending hours planning.
- Daily motivation and reminders keep users inspired, while progress insights visually track improvements and milestones, promoting a sense of accomplishment.
- The quick routine generator allows busy individuals to fit in 5–15 minute workouts without compromising results.
- Wellness and recovery guidance ensures proper stretching, relaxation, and recovery to prevent burnout and injuries.
- Goal setting and achievement alerts encourage consistency and celebrate user progress, reinforcing long-term healthy habits.

END USERS

- Fitness Enthusiasts
- Health-Conscious Individuals
- Personal Trainers and Coaches
- Nutritionists and Dietitians
- Beginners Starting Their Fitness Journey

RESULTS

Agent preview



NutriFit _AI Agent 04:50 AM

Welcome to NutriFit _AI Agent

Welcome to NutriFit AI—where expert care meets your journey to better health and lasting habits.



Type something...



RESULTS

Agent preview



You: 04:52 AM

Suggest a quick 10-minute morning workout.



NutriFit _AI Agent 04:52 AM

Here's a quick 10-minute morning workout for you:

Warm-up (2 minutes): Jumping jacks or brisk walking in place to get your heart rate up.

Workout Routine (7 minutes):

1. **Squats:** 3 sets of 15 reps

- Stand with feet hip-width apart, lower your body as far as you can by pushing your hips back and bending your knees. Pause, then slowly push yourself back to the starting position.

Type something...



RESULTS



You: 04:53 AM

Suggest a high-protein vegetarian meal plan for 3 days.



NutriFit _AI Agent 04:53 AM

Here's a high-protein vegetarian meal plan for three days:

Day 1:

- **Breakfast:** Greek yogurt with mixed berries and a sprinkle of granola.
(Greek yogurt is an excellent source of protein.)
- **Lunch:** Quinoa salad with black beans, corn, avocado, cherry tomatoes, lime juice, olive oil, salt & pepper.
- **Dinner:** Lentil curry served with brown rice.







Type something...



RESULTS

Deployed AI Agent


[Deployment spaces](#) / [NutriFit_AI Agent](#) / [NutriFit_AI Agent](#) /


NutriFit_AI Agent Deployed Online

[API reference](#) [Test](#) [Preview](#)

New chat +

 NutriFit_AI Agent 05:01 AM

Welcome to NutriFit_AI Agent
Welcome to NutriFit AI—where expert care meets your journey to better health and lasting habits.



Type something...

edunet
foundation

CONCLUSION

- Generates personalized workout plans, healthy meal ideas, and daily motivational support.
- Saves time by automating workout scheduling, meal planning, and progress tracking.
- Enhances consistency, accessibility, and overall health outcomes for all users.

FUTURE SCOPE

- Multilingual Fitness and Nutrition Support.
- Voice-Activated Workout and Meal Assistance.
- Real-Time Progress Sharing with Coaches or Friends.
- AI-Powered Goal Prediction and Performance Insights.
- Integration with Wearable Fitness Devices.
- Adaptive Wellness Plans Based on User's Health Data.

IBM CERTIFICATIONS



IBM **SkillsBuild**

Completion Certificate



This certificate is presented to
SOURISH NAREDNRULA

for the completion of

**Lab: Retrieval Augmented Generation with
LangChain**

(ALM-COURSE_3824998)

According to the Adobe Learning Manager system of record

Completion date: 24 Jul 2025 (GMT)

Learning hours: 20 mins

GITHUB LINK

- <https://github.com/Sourish3605/NUTRIFIT-AI-AGENT-IBM-CLOUD.git>



THANK YOU