## **CAPSTONE PROJECT**

# **NUTRIFIT AI AGENT**

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



## **WOW FACTORS**

- NutriFit Al 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 Al-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 longterm healthy habits.

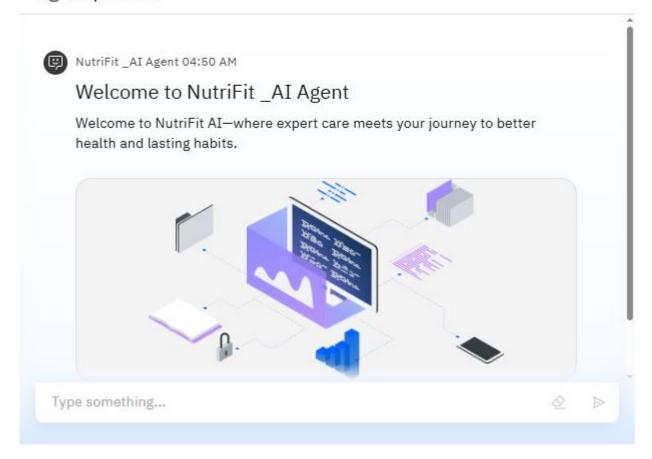


#### **END USERS**

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



#### Agent preview





#### 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):

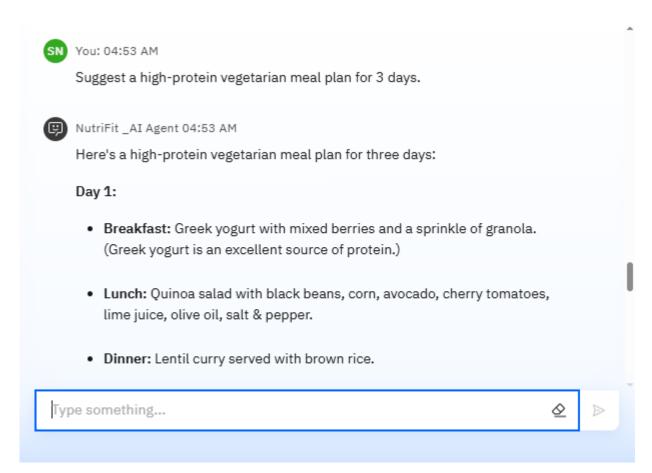
- 1. Squats: 3 sets of 15 reps
  - Stand with feet hip-width apart, lower your body as far as you can by pushing your hips back and bending your knees. Pause, then slowly push yourself back to the starting position.

Type something...



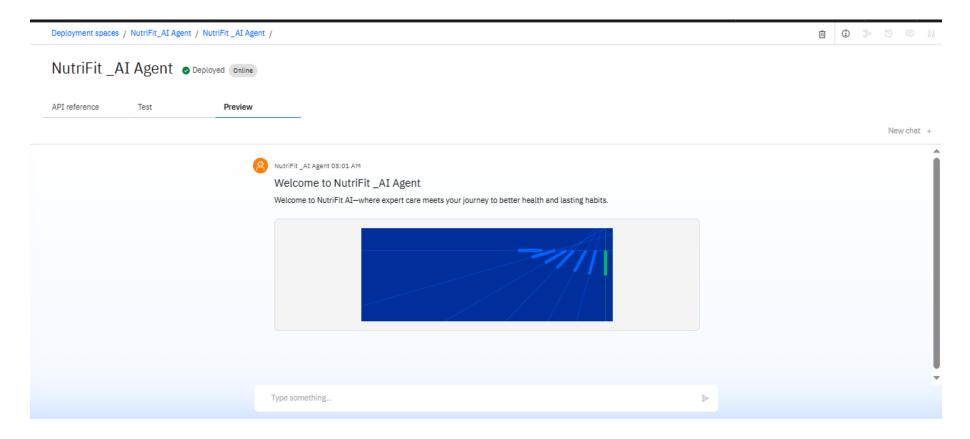








# Deployed AI Agent





#### 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.
- Al-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**

