
IBM HACKATHON PROJECT

FITNESS BUDDY

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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 busy world, maintaining a healthy lifestyle is challenging due to time limitations, lack of motivation, and expensive fitness programs. **Fitness Buddy** is a smart, conversational virtual assistant designed to tackle these issues by providing:
 - Personalized home workout recommendations
 - Daily motivational tips and inspiration
 - Simple and nutritious meal suggestions
 - Guidance for building healthy habits
- Built using **IBM Cloud Lite services and IBM Granite**, Fitness Buddy ensures a cost-effective, intelligent, and always-available health solution tailored to individual needs—making fitness support accessible anytime, anywhere.

TECHNOLOGY USED

IBM cloud lite services








Natural Language Processing (NLP)

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

-  **AI-Powered Personalization**
Tailors workouts, meals, and tips to each user's lifestyle, goals, and preferences.
-  **24/7 Virtual Fitness Coach**
Always available for instant guidance—no appointments, no waiting.
-  **Zero Cost, Maximum Impact**
Built on IBM Cloud Lite—leveraging powerful services without subscription fees.
-  **No Equipment? No Problem!**
Recommends home-based workouts using body weight or simple props.
-  **Smart Meal Suggestions**
Offers easy, nutritious meal ideas using common kitchen ingredients.
-  **Habit Tracking & Motivation Boosts**
Encourages daily consistency with reminders, streaks, and motivational quotes.
-  **Powered by IBM Cloud & Granity**
Scalable, secure, and intelligent backend support ensures reliable performance.

END USERS

- **Busy Professionals**
Looking for quick, personalized fitness routines and wellness tips.
- **Students**
Seeking affordable and flexible ways to stay healthy and active.
- **Home-makers**
Interested in simple workouts and healthy meals without the need to visit a gym.
- **Fitness Beginners**
Needing guidance, motivation, and easy-to-follow plans to start their fitness journey.
- **Elderly Individuals**
Wanting gentle, guided exercises and basic health advice from the comfort of home.
- **Remote Workers / Freelancers**
Looking to balance sedentary work with health-focused habits.
- **People with Budget Constraints**
Who can't afford gym memberships or personal trainers but still want expert advice.
- **Health-Conscious Individuals**
Interested in daily fitness, nutrition guidance, and long-term habit formation.

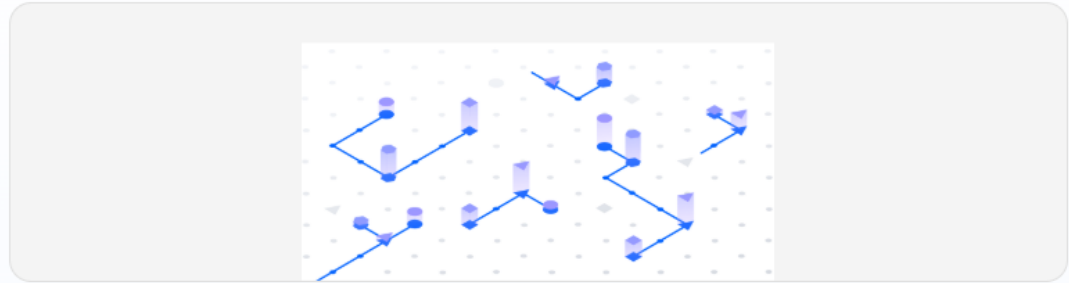
RESULTS



Fitness Buddy 07:36 PM

Welcome to Fitness Buddy

Fitness Buddy is your smart virtual coach for workouts, meals, and motivation—anytime, anywhere !



Sample questions

I'm 25 and want to lose weight. Can you suggest a beginner home workout?



What's a good meal plan for a vegetarian trying to build muscle?



I only have 20 minutes a day—what kind of routine should I follow?



I'm 50+ and need low-impact exercises. What do you recommend?




Type something...



RESULTS

AS You: 07:35 PM

I'm 35 and sit at a desk all day—what stretches should I do?

 Fitness Buddy 07:35 PM

Here are some stretches you can do at your desk:

1. Neck stretch: Slowly tilt your head to the side, bringing your ear towards your shoulder. Hold for 30 seconds and then switch sides.
2. Shoulder rolls: Roll your shoulders forward and backward in a circular motion. Repeat for 10-15 repetitions.
3. Chest stretch: Place your hands on your desk and lean forward, stretching your chest. Hold for 30 seconds.
4. Back stretch: Place your hands on your desk and lean back, stretching your back. Hold for 30 seconds.
5. Wrist extensions: Hold your arm straight out in front of you and lift your hand up, using only your wrist. Hold for 5-10 seconds and then lower your hand back down. Repeat for 10-15 repetitions.
6. Seated twist: Sit with your feet on the floor and knees bent. Twist your torso to one side, keeping your feet and hips facing forward. Hold for 30 seconds and then switch sides.
7. Leg stretch: Slowly lift one leg out to the side, keeping your knee straight. Hold for 30 seconds and then lower your leg back down. Repeat on the other side.

Remember to breathe deeply and slowly while stretching, and don't bounce or force your muscles beyond a comfortable range of motion. It's also a good idea to stretch regularly throughout the day, especially if you have a job that involves sitting for long periods of time.

► How did I get this answer?



RESULTS



You: 07:30 PM

What's a good meal plan for a vegetarian trying to build muscle?



Fitness Buddy 07:30 PM

Here's a sample 5-day vegetarian meal plan for building muscle:

Day 1:

- Breakfast: Vegetable omelette with wholemeal toast
- Lunch: Scrambled tofu with vegetables
- Dinner: Porridge with nut butter

Day 2:

- Breakfast: Greek yoghurt with berries and granola
- Lunch: Chickpea salad with avocado and quinoa
- Dinner: Lentil soup with wholemeal bread

Day 3:

- Breakfast: Smoothie bowl with banana, spinach, almond milk, and almond butter topping
- Lunch: Grilled tofu with roasted vegetables and brown rice
- Dinner: Vegetable stir-fry with tempeh and brown rice

Day 4:

- Breakfast: Wholemeal toast with almond butter and banana slices
- Lunch: Quinoa salad with black beans, corn, and a citrus vinaigrette
- Dinner: Grilled portobello mushrooms with roasted vegetables and quinoa

Day 5:

- Breakfast: Wholemeal waffles with berries and a dollop of yoghurt
- Lunch: Lentil and vegetable curry with brown rice
- Dinner: Stuffed bell peppers with quinoa, black beans, and vegetables

Remember to stay hydrated by drinking plenty of water throughout the day. Also, ensure you're getting enough protein to support muscle growth by including protein-rich foods like beans, lentils, tofu, and tempeh in your meals.

Type something...



RESULTS

Deployed AI Agent

Fitness Buddy Deployed Online


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

New

Fitness Buddy 08:13 PM

Welcome to Fitness Buddy

Fitness Buddy is your smart virtual coach for workouts, meals, and motivation—anytime, anywhere.



Quick start samples

I'm 25 and want to lose weight. Can you suggest a beginner home workout? →

What's a good meal plan for a vegetarian trying to build muscle? →

I only have 20 minutes a day—what kind of routine should I follow? →

I'm 50+ and need low-impact exercises. What do you recommend? →

Type something... →

CONCLUSION

- **Personalized Wellness for Everyone**

Fitness Buddy offers tailored workouts, nutrition tips, and motivation—making healthy living accessible to all.

- **AI Meets Affordability**

Leveraging IBM Cloud Lite and Granity, the solution delivers intelligent support without the cost of traditional fitness services.







- **Empowering Consistency and Healthy Habits**

By providing on-demand guidance and daily inspiration, Fitness Buddy helps users build long-term, sustainable wellness routines.

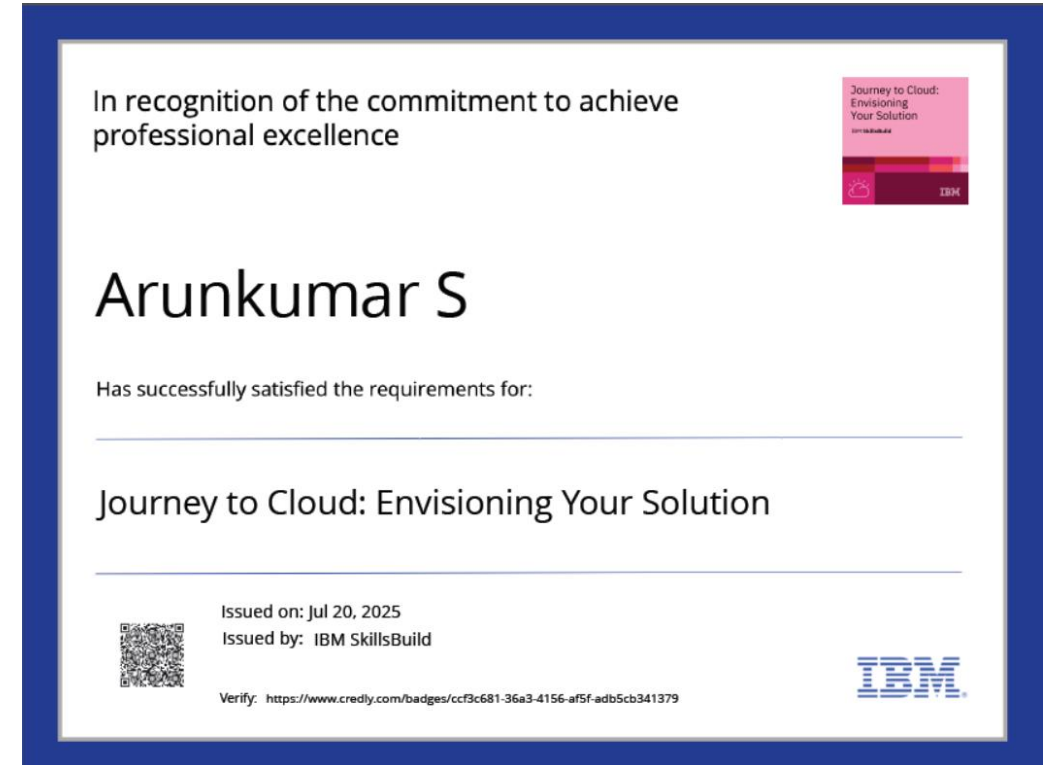
GITHUB LINK

Git-hub Link – [View Repository](#)

FUTURE SCOPE

-  **Integration with Wearables**
Sync with fitness bands and smartwatches for real-time activity and health tracking.
-  **AI-Driven Progress Analytics**
Provide visual dashboards with personalized progress reports and fitness insights.
-  **Multilingual Support**
Enable regional language support to reach a wider and more diverse user base.
-  **Virtual Trainer Collaboration**
Allow users to connect with certified fitness experts for advanced guidance.
-  **Smart Scheduling**
Auto-generate daily routines and reminders based on user availability and goals.
-  **Community & Social Features**
Introduce user forums, challenges, and leaderboards to boost motivation through peer engagement.

IBM CERTIFICATIONS



24/07/2025, 18:30

Completion Certificate | SkillsBuild

IBM **SkillsBuild**

Completion Certificate



This certificate is presented to
Arunkumar S

for the completion of

**Lab: Retrieval Augmented Generation with
LangChain**

(ALM-COURSE_3824998)

According to the Adobe Learning Manager system of record

Completion date: 23 Jul 2025 (GMT)

Learning hours: 20 mins

https://skillsyourearning.ibm.com/certificate/ALM-COURSE_3824998

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THANK YOU