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# Fitness Buddy

## **AI-POWERED PERSONALIZED HEALTH & FITNESS ASSISTANT**

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# OUTLINE

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

# PROBLEM STATEMENT

- Problem:
  - In today's fast-paced world, many individuals find it difficult to maintain a healthy lifestyle due to:
    - Lack of personalized guidance
    - Time constraints
    - Inconsistent motivation
- Solution:
  - Fitness Buddy – A conversational, AI-powered assistant that:
    - Recommends home workouts
    - Provides motivational support
    - Suggests healthy meals
    - Encourages consistency and habit-building

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# 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

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# WOW FACTORS

- 24/7 availability of personalized health guidance
- Adaptive fitness and meal plans based on real-time user input
- Interactive voice and text-based interface
- Local language support for inclusivity
- Dynamic motivation and habit tracking system


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## END USERS

- Fitness beginners and enthusiasts
- Busy professionals
- Students and homemakers
- Health-conscious individuals
- People in remote/rural areas needing low-cost, intelligent support

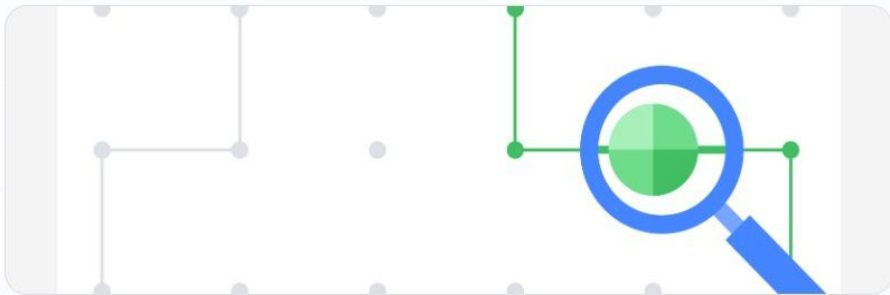
# RESULTS

## Agent preview

 Fitness Buddy 09:06 PM

### Welcome to Fitness Buddy

AI-powered Fitness Buddy offers workout tips, healthy meals, and motivation



Type something...



## Agent preview

 You: 09:07 PM

What are some beginner home workouts without equipment?

 Fitness Buddy 09:07 PM

Great question! Starting a fitness journey is all about finding activities you enjoy and can stick with. Here are a few beginner-friendly home workouts that require no equipment:

1. **Bodyweight Strength Training:** This includes exercises like squats, lunges, push-ups (against a wall or against your knees if regular ones are too hard), and planks. Aim for 3 sets of 10-15 repetitions for each exercise.
2. **Yoga:** Yoga is excellent for flexibility and balance. There are plenty of beginner-level yoga routines available online. Try poses like the Mountain Pose, Downward Dog, and Child's Pose.
3. **Beginner Cardio:** Simple activities like jogging in place, jumping jacks, or high knees can get your heart rate up. Start with 20-30 seconds of these exercises, followed by a short rest or light walking.
4. **Pilates:** Pilates focuses on core strength and stability. Look for beginner Pilates routines online, and exercises like the Pilates Hundred or Leg Circles are good starting points.

Remember, it's important to start slow and gradually increase intensity as your fitness improves.

*Listen to your body and rest when needed. Stay hydrated and aim for consistency over intensity.*

Type something...





# RESULTS

## Agent preview



You: 09:07 PM

Suggest a quick 15-minute full-body workout.



Fitness Buddy 09:07 PM

Absolutely, here's a simple 15-minute full-body workout you can do at home without any equipment:

### Warm-up (3 minutes)

- Jumping Jacks: 1 set of 20 reps
- Arm Circles: 1 set of 15 reps (forward and backward)
- High Knees: 1 set of 20 reps
- Butt Kicks: 1 set of 20 reps

### Strength Training (5 minutes)

- Squats: 3 sets of 10 reps
- Push-ups (against a wall or on your knees if needed): 3 sets of 8-10 reps
- Planks: Hold for 30 seconds, rest for 15 seconds, repeat once more

### Cardio (4 minutes)

- High Knees: 1 set of 30 seconds (as fast as you can)

Type something...



## Agent preview

### Cardio (4 minutes)

- High Knees: 1 set of 30 seconds (as fast as you can)
- Jumping Jacks: 1 set of 30 seconds
- Rest: 30 seconds
- Repeat High Knees and Jumping Jacks once

### Core (2 minutes)

- Bicycle Crunches: 3 sets of 15 reps (each side)
- Russian Twists: 3 sets of 10 reps (each side)

### Cool Down (1 minute)

- Stretching: Hold each stretch for about 15-30 seconds. Focus on your legs, arms, and core.

Remember, it's crucial to maintain proper form during exercises to prevent injury. If you're new to working out, you might find this challenging, and that's perfectly okay. Modify as needed, and listen to your body. You're doing fantastic by dedicating time to your fitness! Keep up the great work, and feel free to share your progress or any questions you have along the way.

► How did I get this answer?



Type something...



# RESULTS

The screenshot displays the IBM watsonx Agent Lab interface. The top navigation bar includes the IBM watsonx logo, an 'Upgrade' button, a help icon, a notification bell, the user's account 'Manav Rathod's Account', the location 'Dallas', and a profile icon 'MR'. Below the navigation bar, the breadcrumb trail reads 'Projects / Manav's sandbox / Agent Lab'. The main interface is split into two panels. The left panel, titled 'Build', contains a 'Setup' section with fields for 'Name' (filled with 'Fitness Buddy') and 'Description' (filled with 'AI-powered Fitness Buddy offers workout tips, healthy meals, and motivation', with a 75/100 character count). Below these is an 'Icon' section with a grid of icons, including a selected orange robot icon. To the right of the icon grid is a 'Placeholder image' section showing a large image of a green circuit board with a blue magnifying glass. At the bottom of the 'Build' panel is a 'Quick start questions' section with a text input field and a plus icon. The right panel, titled 'Agent preview', shows a chat interface. It starts with a header 'Fitness Buddy 09:08 PM' and a welcome message: 'Welcome to Fitness Buddy' followed by 'AI-powered Fitness Buddy offers workout tips, healthy meals, and motivation'. Below the text is a large image of the same green circuit board with a blue magnifying glass. At the bottom of the preview panel is a text input field with the placeholder 'Type something...' and a send icon.

IBM watsonx

Upgrade ? Bell Manav Rathod's Account Dallas MR

Projects / Manav's sandbox / Agent Lab

Share feedback 3 Unsaved New agent + Deploy

**Build** AI Model: granite-3-3-8b-instruct

**Setup**

Name

Fitness Buddy

Description 75/100

AI-powered Fitness Buddy offers workout tips, healthy meals, and motivation

Icon

Placeholder image

Quick start questions

Add up to 4 quick start questions that your users can select. +

**Agent preview**

Fitness Buddy 09:08 PM

Welcome to Fitness Buddy

AI-powered Fitness Buddy offers workout tips, healthy meals, and motivation

Type something...

# RESULTS

## Advanced configuration

### Agent instructions

### Common instructions

Agent instructions are unique to this agent and will affect its specific behavior.

Reset to default



When greeted, say:

"Hi! I'm your Fitness Buddy. Ready to help you move, eat better, and feel great!"

You must:

- Recommend personalized home workout routines (e.g., strength, yoga, beginner cardio)
- Suggest healthy and easy meal ideas
- Give motivational tips and habit-building strategies
- Adjust advice based on user mood, fitness level, or daily routine
- Keep responses positive, supportive, and jargon-free
- Simulate results based on general fitness and nutrition knowledge

Avoid:

- Providing strict medical advice
- Assuming access to real-time fitness APIs
- Using complex terminology—keep it simple and friendly

Cancel

Apply

# RESULTS

IBM watsonx

Upgrade ? 🔔

Manav Rathod's Account ▾ Dallas ▾ MR

Deployment spaces /

Fitness Agent

Overview Assets **Deployments** Jobs Manage

🔍 Search

Name	Type	Status	Asset	Asset type	Tags	Last modified	↓
🔊 Fitness Buddy	Online	✅ Deployed	Fitness Buddy	Ai service	wx-agent ✎	33 seconds ago Manav Rathod (You)	⋮

Items per page: 20 ▾ 1-1 of 1 items

1 of 1 pages ⏪ ⏩

# RESULTS

IBM watsonx

Upgrade ⓘ 🔔

Manav Rathod's Account ▾

Dallas ▾

MR

Deployment spaces / Fitness Agent / Fitness Buddy /

Fitness Buddy

✔ Deployed

Online


API reference

Test

Evaluations

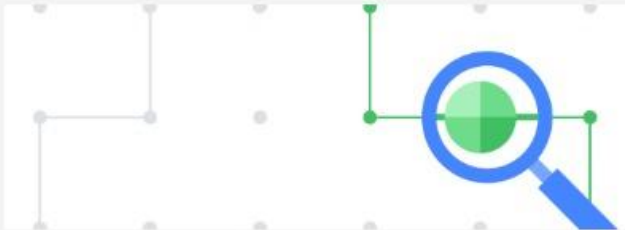
Preview

New chat +

 Fitness Buddy 09:19 PM

### Welcome to Fitness Buddy

AI-powered Fitness Buddy offers workout tips, healthy meals, and motivation



Type something... 🔍

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## CONCLUSION

- Fitness Buddy democratizes fitness coaching
- Encourages daily habits aligned with user lifestyle
- Uses advanced AI to adapt over time
- Bridges accessibility gaps with multi-modal support
- Cost-effective solution using IBM Cloud Lite

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# FUTURE SCOPE

Integration with wearables for real-time tracking

- Mood-based workout and meal suggestions
- Community features for peer motivation
- Image-based food and activity recognition
- Offline functionality for underserved regions

# IBM CERTIFICATIONS

In recognition of the commitment to achieve  
professional excellence



**MANAV RATHOD**

Has successfully satisfied the requirements for:

**Getting Started with Artificial Intelligence**



Issued on: Jul 23, 2025  
Issued by: IBM SkillsBuild

Verify: <https://www.credly.com/badges/20e2a89f-a1f3-4729-9272-179125c687a5>





# IBM Certifications



Git hub like: <https://github.com/Manav1817/Fitness-Buddy-AI-Powered-Nutrition-Fitness-Assistant>



**THANK YOU**