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# IBM HACKATHON PROJECT

## FITNESS BUDDY AI

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# OUTLINE

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

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# PROBLEM STATEMENT

Many individuals—especially working professionals, students, and homemakers—struggle to maintain a consistent and healthy lifestyle due to lack of personalized fitness guidance, motivation, and time.

Traditional fitness solutions often require expensive memberships, rigid schedules, or in-person consultations that don't adapt well to individual needs or daily routines.

Proposed Solution:

An AI-powered Fitness Buddy that uses Natural Language Processing (NLP) and AI-based personalization to offer users customized home workouts, healthy meal suggestions, motivational tips, and habit-building guidance—all in a conversational format

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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

# WOW FACTORS

This AI fitness agent will help users save time, stay consistent, and improve their overall health by offering personalized workouts, meal suggestions, and motivational support—all accessible through a simple chat interface.

It promotes healthy habits, reduces dependency on rigid schedules or expensive trainers, and empowers users to take control of their well-being with ease and flexibility.

- **Personalized workout routines** based on user goals and preferences
- **Nutritious meal suggestions** tailored to dietary needs (e.g., high-protein, vegan, low-carb)
- **Daily motivation quotes** and mental wellness tips
- **Habit tracking** to build consistency over time
- **Fitness goal recommendations** (weight loss, muscle gain, endurance)
- **Progress encouragement and check-ins** to keep users engaged

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## END USERS

- Health-conscious Individuals
- Gym Trainers & Fitness Coaches
- Nutritionists
- Medical & Wellness Experts
- Rehabilitation Centers
- College Athletes or Sports Departments

# RESULTS

- Clean, welcoming interface
- Smart starter questions for users
- Chat-based fitness guidance
- Visuals that reinforce health theme

## Agent preview



Fitness Buddy AI 08:58 PM

Welcome to Fitness Buddy AI

FitBuddy is an AI fitness chatbot for workouts, meals, and motivation.



## Sample questions

How can I start my fitness journey?



How do I build a daily fitness habit?



Type something...





# RESULTS

- Human-like replies
- Clear and structured answers
- Beginner-friendly tips
- Motivational tone
- Quick responses

## Agent preview



You: 09:31 PM

How do I build a daily fitness habit?



Fitness Buddy AI 09:31 PM

Building a daily fitness habit can be challenging, but with the right approach, it's achievable! Here are some tips:

1. **Start Small:** Begin with short, manageable workouts. Even 10-15 minutes a day can make a difference.
2. **Consistency is Key:** Choose a specific time each day for your workout and stick to it.
3. **Set Clear Goals:** Having a goal, like losing weight or gaining strength, can keep you motivated.
4. **Track Your Progress:** Use a fitness app or journal to record your workouts. Seeing your progress can be motivating.
5. **Make it Enjoyable:** Find an activity you love. If you enjoy what you're doing, you're more likely to stick with it.
6. **Stay Accountable:** Share your fitness goals with a friend or family member. They can help keep you on track.

Remember, it's okay to have off days. The important thing is to get back on track the next day. Keep going, you're doing great!

► How did I get this answer?

Type something...



# RESULTS

- Delivered **10 motivational quotes instantly**
- Covers **mental strength & discipline**
- Adds **inspiration and encouragement** to user journeys
- **Engaging and varied**—not just generic line

## Agent preview



You: 09:29 PM

Give me a fitness motivation 10 quote



Fitness Buddy AI 09:29 PM

Here are 10 motivational fitness quotes for you:

1. "The last three or four reps is what makes the muscle grow. This area of pain divides the champion from someone else who is not a champion." - Arnold Schwarzenegger
2. "Strength does not come from physical capacity. It comes from an indomitable will." - Mahatma Gandhi
3. "You, yourself, as much as anybody in the entire universe, deserve your love and affection." - Buddha
4. "It's not about being the best. It's about being better than yesterday." - Unknown
5. "The difference between a successful person and others is not a lack of strength, not a lack of knowledge, but rather a lack of will." - Vince Lombardi
6. "Don't watch the clock; do what it does. Keep going." - Sam Levenson
7. "I can't give up. I have too much to do." - Zig Ziglar
8. "You miss 100% of the shots you don't take." - Wayne Gretzky
9. "Believe you can and you're halfway there." - Theodore Roosevelt
10. "Strong people don't put others down. They lift them up. Strong people don't feel the need to explain themselves because they know they are right." - C.S. Lewis

# RESULTS

## Deployed FitBuddy AI

The screenshot displays the IBM Watsonx dashboard for a deployed model named 'Fitness Buddy AI'. The top navigation bar includes the IBM Watsonx logo, an 'Upgrade' button, help and notification icons, and user account information for 'sujal saroj's Account' in the 'Dallas' region. The breadcrumb trail indicates the path: 'Deployment spaces / Fitness Buddy AI / Fitness Buddy AI /'. The model's status is 'Deployed' (indicated by a green checkmark) and 'Online' (indicated by a grey button). Below the status, there are tabs for 'API reference', 'Test', and 'Preview', with the 'Preview' tab currently selected. The chat preview shows a conversation where a user asks for 5 healthy meal suggestions, and the AI provides a list of four meal ideas: Breakfast (Greek Yogurt Parfait), Lunch (Grilled Chicken Salad), Dinner (Baked Salmon with Quinoa and Steamed Vegetables), and a Snack (Hummus with Carrot and Celery Sticks). A text input field at the bottom of the chat area contains the placeholder text 'Type something...'. A 'New chat +' button is located in the top right corner of the chat area.

IBM watsonx Upgrade ? sujal saroj's Account Dallas SS

Deployment spaces / Fitness Buddy AI / Fitness Buddy AI /

Fitness Buddy AI ✓ Deployed Online

API reference Test **Preview**

New chat +

**S** You 03:41 PM  
Can you suggest 5 healthy meals that should be included in a daily routine?"

**👤** Fitness Buddy AI 03:41 PM  
Absolutely! Here are five healthy meal ideas that can easily fit into your daily routine:

1. **Breakfast:** Greek Yogurt Parfait - Layer Greek yogurt with mixed berries and a sprinkle of granola for a balance of protein, fiber, and complex carbs.
2. **Lunch:** Grilled Chicken Salad - Toss mixed greens, grilled chicken, cherry tomatoes, cucumber, and a light vinaigrette. This salad is high in protein and packed with vitamins.
3. **Dinner:** Baked Salmon with Quinoa and Steamed Vegetables - Salmon provides healthy fats and protein, quinoa is a complete protein and whole grain, and steamed vegetables add fiber and essential nutrients.
4. **Snack:** Hummus with Carrot and Celery Sticks - Hummus is a great source of plant-based protein, and the veggies provide

Type something...

## CONCLUSION

- FitBuddy AI can generate workout plans, suggest fitness goals, and even build personalized routines.
- It saves time by automating tasks like meal planning, progress tracking, and daily reminders.
- FitBuddy enhances motivation, consistency, and efficiency in both beginner and advanced fitness journeys.

## GITHUB LINK

- <https://github.com/sujalsaroj/IBM-HACKATHON-FitBuddy>

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# FUTURE SCOPE

- Multilingual support for users across different regions.
- Voice-enabled assistant for hands-free interaction.
- Real-time collaboration with fitness coaches and peers.
- Smart progress tracking with AI-based plateau detection.
- Integration with wearables and fitness apps.
- Personalized workout and nutrition plans powered by AI.

# IBM CERTIFICATIONS

In recognition of the commitment to achieve  
professional excellence



## Sujal Saroj

Has successfully satisfied the requirements for:

### Getting Started with Artificial Intelligence



Issued on: Jul 20, 2025  
Issued by: IBM SkillsBuild

Verify: <https://www.credly.com/badges/5ae4c39d-70ce-483a-88b2-9a1834017d9a>



IBM **SkillsBuild**

Completion Certificate



This certificate is presented to

Sujal Saroj

for the completion of

**Lab: Retrieval Augmented Generation with  
LangChain**

(ALM-COURSE\_3824998)

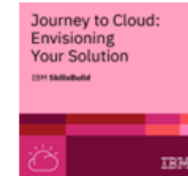
According to the Adobe Learning Manager system of record

**Completion date:** 28 Jul 2025 (GMT)

**Learning hours:** 20 mins



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# Sujal Saroj

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## Journey to Cloud: Envisioning Your Solution

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**THANK YOU**