

# IBM AICTE PROJECT

## FITNESS BUDDY – SMART FITNESS & WELLNESS PARTNER

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# OUTLINE

- **Problem Statement**
- **Proposed Solution**
- **Technology Stack**
- **Unique Features**
- **Target users**
- **Result**
- **Conclusion**
- **Git-hub Link**
- **Future scope**
- **IBM Certifications**

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# PROBLEM STATEMENT

In today's fast-paced world, people often **neglect their fitness goals** due to a lack of time, proper guidance, and motivation.

- Gym memberships remain unused.
- Meal plans are hard to follow without expert support.
- Staying motivated for regular exercise is a constant struggle.

There is a **need for a simple, accessible digital coach** that can guide users in real-time.

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# PROPOSED SOLUTION

AI Fitness Buddy is an AI-powered conversational assistant that:

- Designs quick, personalized workout plans based on user preferences.
- Provides healthy meal suggestions that fit everyday lifestyles.
- Sends motivational nudges to keep users on track.

Works as a 24/7 virtual trainer accessible from any device.

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# TECHNOLOGY STACK

- IBM cloud lite services
- Natural Language Processing (NLP)
- Retrieval Augmented Generation (RAG)
- Prompt-based AI technology for conversational flows
- IBM Granite model

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# 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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# UNIQUE FEATURES

- **Instant recommendations** – No waiting for human trainers.
- **Progress tracking** – Keeps records of workouts and meals.
- **Mood-based suggestions** – Adapts routines based on user energy levels.
- **No-cost deployment** – Fully functional on IBM Cloud Lite free tier.
- **Easy integration** – Can be added to websites or mobile apps.

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# TARGET USERS

- **Students & professionals** who need quick fitness tips.
- **Beginners** looking for easy-to-follow routines.
- **Busy individuals** struggling to maintain healthy habits.
- **Health mentors** who want an AI co-assistant.



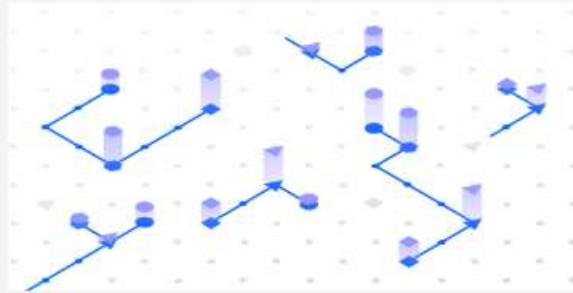
# RESULTS



FitnessBuddy 11:39 PM

## Welcome to FitnessBuddy

Fitness Buddy is your AI-powered personal trainer and nutrition assistant, helping you stay fit, eat



Quick start samples

Type something...



# RESULTS



You 11:44 PM

Create a weekly fitness schedule for me.



FitnessBuddy 11:44 PM

Sure, I'd be happy to help you create a weekly fitness schedule! To make it personalized, could you please tell me a bit more about your current fitness level, available days for workouts, and any specific goals or preferences you have?

In the meantime, here's a basic template you can adjust:

## Monday - Strength Training (Upper Body)

- Push-ups: 3 sets of 10 reps
- Dumbbell rows: 3 sets of 10 reps per arm
- Overhead press: 3 sets of 10 reps

## Tuesday - Cardio

Type something...



Let's refine this schedule based on your preferences and fitness level!



You 11:56 PM

what should i eat after workout?



FitnessBuddy 11:56 PM

Great question! Post-workout nutrition is crucial for muscle recovery and growth. Here's a simple guideline:

**1. Protein:** Aim for about 20-40 grams of high-quality protein to support muscle repair and recovery. Sources can include:

- Greek yogurt (20g protein per 170g serving)
- Chicken breast (26g per 100g)
- Eggs (6g per egg)
- Tofu (10-15g per 100g)
- Protein shakes (20-30g protein, depending on the brand and type)

Type something...



# DEPLOYED AI AGENT

The screenshot displays the IBM watsonx web interface. At the top, a dark navigation bar contains the 'IBM watsonx' logo, an 'Upgrade' button, and user account information for 'Himanshi'. Below this, a breadcrumb trail shows the path: 'Deployment spaces / FitnessBuddy / FitnessBuddy /'. The main content area features the 'FitnessBuddy' agent name with 'Deployed' and 'Online' status indicators. Three tabs are visible: 'API reference', 'Test', and 'Preview', with the 'Preview' tab currently selected. The chat window shows a conversation where the user asks for a weekly fitness schedule, and the agent responds with a request for more details and a basic template for Monday's strength training.

IBM watsonx Upgrade ? ⓘ Himanshi's Account Dallas H

Deployment spaces / FitnessBuddy / FitnessBuddy /

FitnessBuddy ✓ Deployed Online

API reference Test **Preview**

New chat +

**You** 11:44 PM  
Create a weekly fitness schedule for me.

**FitnessBuddy** 11:44 PM  
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# CONCLUSION

- AI Fitness Buddy combines **artificial intelligence, cloud technology**, and a **user-friendly design** to deliver a personal fitness companion that is **simple, scalable, and impactful**.
- It demonstrates how **conversational AI** can help individuals **stay consistent with their health goals**, making fitness **accessible and approachable for everyone**.
- This project highlights the **power of prompt engineering, cloud integration**, and **personalized AI solutions** in solving real-world challenges in health and wellness.

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## GITHUB LINK

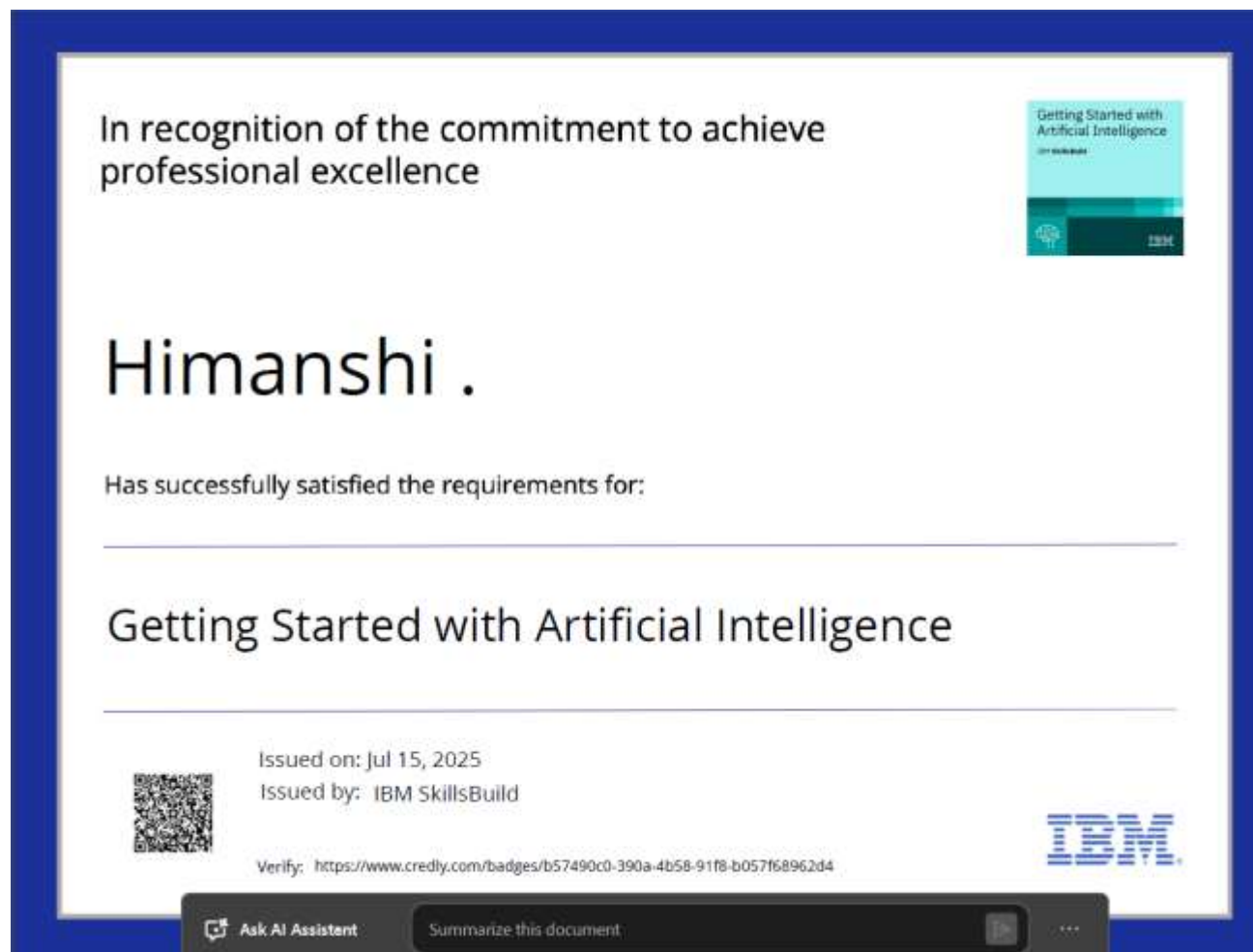
<https://github.com/Himanshii13/Fitness-Ai-Assistant>

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# FUTURE SCOPE

- **Integration with fitness bands & smartwatches** for real-time feedback.
- **Voice-based interaction** for a hands-free experience.
- **Support for multiple languages** to reach a broader audience.
- **Community features** like group challenges and leaderboards.

# IBM CERTIFICATE

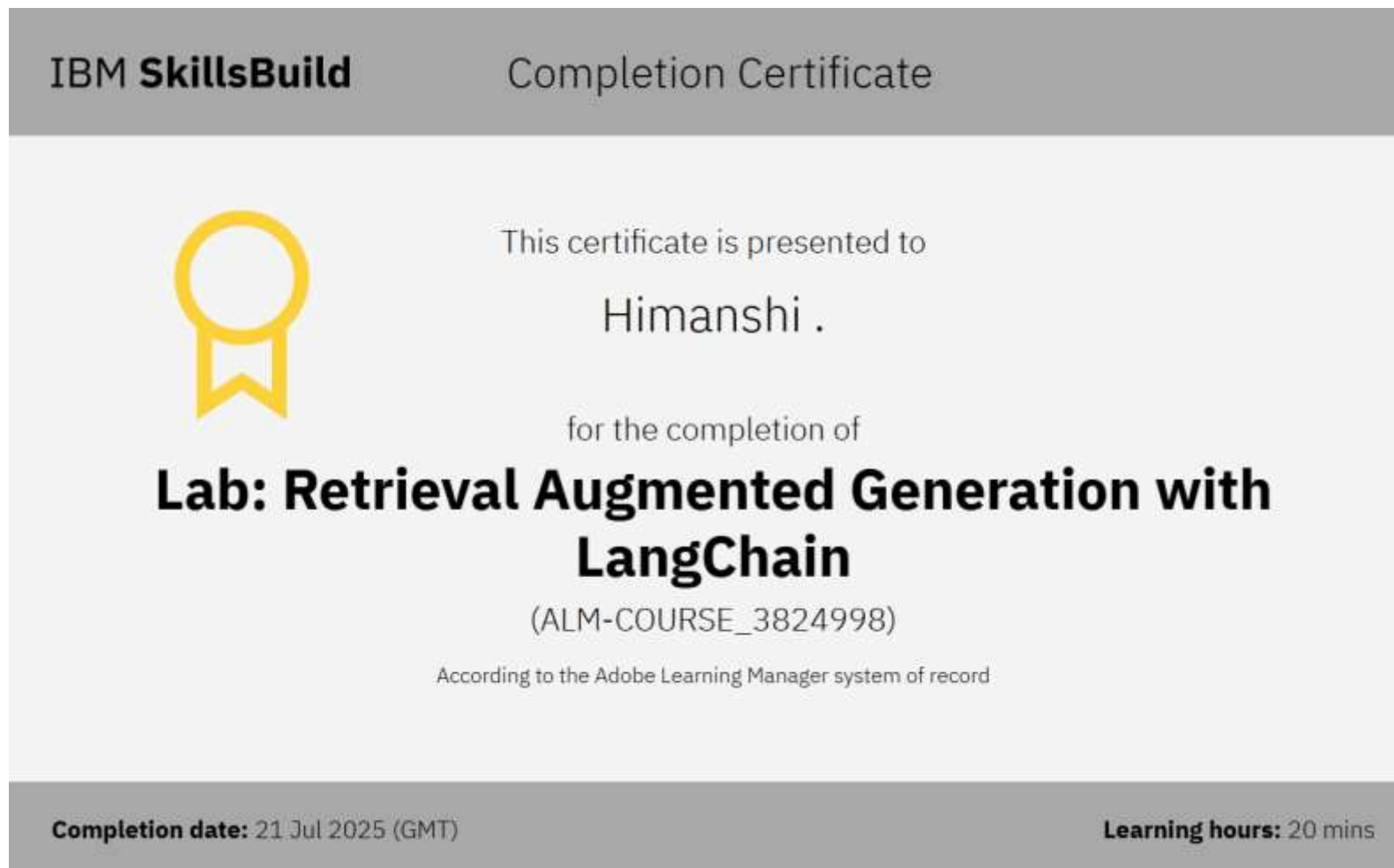


# IBM CERTIFICATE





# IBM CERTIFICATE



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***THANK YOU!***