

Digital Financial Literacy Agent

FINANCIAL AGENT

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OUTLINE

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PROBLEM STATEMENT

- A significant portion of the population lacks confidence and knowledge in navigating the digital financial landscape. This "digital literacy gap" creates major barriers, making individuals vulnerable to online scams, high-interest debt, and poor financial decisions. Key challenges include:
- **Complexity:** Financial tools like UPI, net banking, and credit scores can be intimidating.
- **Accessibility:** Reliable financial information is often fragmented across different platforms and filled with jargon.
- **Language & Culture:** Most financial guidance is not available in regional languages or tailored to specific cultural contexts, excluding large segments of the population.
- **Security Risks:** Without proper knowledge, users are prime targets for phishing, fraud, and financial scams.

PROPOSED SOLUTION

I propose an **AI Agent for Digital Financial Literacy**, powered by Retrieval-Augmented Generation (RAG). This agent acts as a personal, trustworthy financial guide.

It retrieves and synthesizes reliable, up-to-date content from verified sources like government portals (e.g., RBI, SEBI), banking websites, and reputable educational platforms. With robust multilingual support, users from diverse backgrounds can interact in their preferred language and get clear answers to critical questions like:

"How do I send money safely using UPI?"

"What are the signs of a loan scam?"

"Explain credit card interest rates in simple terms."

The agent's **goal is to make financial literacy accessible**, personalized, and culturally inclusive, empowering users to manage their finances with confidence.

TECHNOLOGY USED

- *Natural Language Processing (NLP):*

To understand and process user queries in multiple languages and conversational styles.

- *Retrieval Augmented Generation (RAG):*

To ensure answers are grounded in factual, reliable data from a curated knowledge base of trusted financial sources.

- *IBM Granite model:*

As the core large language model to generate clear, coherent, and helpful responses

IBM CLOUD SERVICES USED

- IBM Cloud Watsonx AI Studio
- IBM Cloud Watsonx AI runtime
- IBM Cloud *IBM Cloud Watsonx AI Studio* : For Building, managing, and deploying the AI agent.
- *IBM Cloud Watsonx AI runtime* : To ensure answers are grounded in factual , reliable data from a curated knowledge base of trusted financial sources
- *IBM Granite foundation model* : as the core large language model to generate clear , coherent and helpful responses.
- d Agent Lab
- IBM Granite foundation model

WOW FACTORS

This agent moves beyond generic advice to provide a truly empowering user experience.

- ***Financial Inclusion:*** By offering multilingual support, it brings essential financial knowledge to rural and non-English speaking populations.
- ***Trust and Safety:*** The RAG approach ensures information is not hallucinated but sourced from verified, authoritative documents, protecting users from misinformation.
- ***Personalized Education:*** Users can learn at their own pace, asking specific questions relevant to their immediate needs without feeling judged.
- ***Proactive Fraud Prevention:*** Empowers users with the knowledge to identify and avoid common online scams, acting as a first line of defense.

END USERS

- Academic Researchers
- Research Institutions and Universities
- Industry R&D Teams
- Educators

RESULTS

Upgrade?🔔

Kalyannagu Pasupuleti's A...▼

Dallas▼

KP

Share feedbackβ

Unsaved📁▼

New agent+

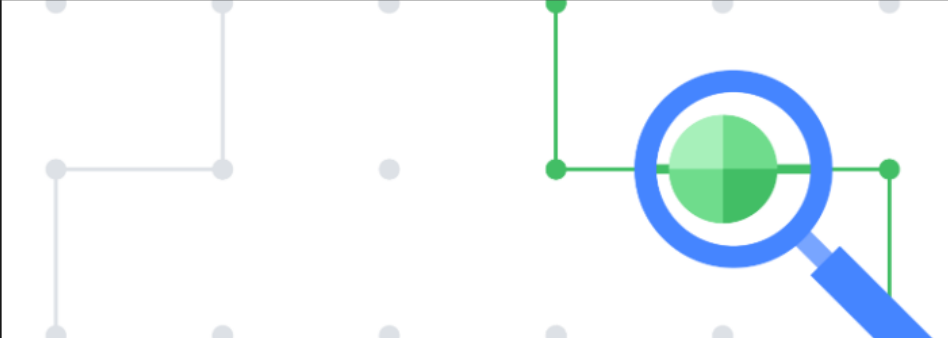
Deploy🚀

Agent preview

👤 watsonx Agent 10:25 AM

Welcome to watsonx Agent

Change this description to reflect your particular agent



🗨️➤

RESULTS

Upgrade

?


🔔

Kalyannagu Pasupuleti's A... ▾


Dallas ▾

KP

Share feedback β

Unsaved  ▾

New agent +


Deploy 

Agent preview

KP

You: 10:23 AM

hi



watsonx Agent 10:23 AM

Hi, I am watsonx.ai agent. How can I help you?

▼ How did I get this answer?


▾ 1: Generating final answer ✓

Steps created by Agent

KP

You: 10:23 AM

how to change the upi





watsonx Agent 10:23 AM

To change the UPI, you can follow these steps:

1. Open the Google Pay app and tap on the bank account that you want to edit.
2. Tap on "More" and then "Change UPI PIN".
3. Enter your old UPI PIN and create a new one.

Type something...





RESULTS

Upgrade

?

🔔


Kalyannagu Pasupuleti's A... ▾

Dallas ▾


KP

Share feedback

β

Unsaved  ▾

New agent +


Deploy 

Agent preview

KP

You: 10:28 AM

how create and connect the upi



watsonx Agent 10:28 AM

To create and connect UPI, you can follow these steps:

1. Download and install a UPI-enabled app, such as Google Pay, PhonePe, or Axis Bank's UPI app.

2. Create a profile by entering your details, such as name, virtual ID (payment address), and password.


3. Add and link your bank account to the UPI app.

4. Create a UPI ID and UPI Pin.



5. Set up your Virtual Payment Address.

You can also find more information and instructions on the official websites of the National Payments Corporation of India (NPCI) or the banks that support UPI, such as ICICI Bank or Axis Bank. Additionally, you can check out online forums and communities, such as Reddit's r/nri, for tips and experiences from other users who have set up UPI for NRIs.

► How did I get this answer?



Type something...

RESULTS

Deployed AI Agent

The screenshot displays the IBM watsonx Agent web interface. At the top, the header includes the IBM watsonx logo, an 'Upgrade' button, help and notification icons, and user information for 'Kalyannagu Pasupuleti's A...' with a location dropdown set to 'Dallas' and a profile icon 'KP'. The breadcrumb trail reads 'Deployment spaces / deployment / watsonx Agent /'. The main content area features the 'watsonx Agent' title with a green checkmark and 'Deployed' status, and an 'Online' status badge. Below this are three tabs: 'API reference', 'Test', and 'Preview', with the 'Preview' tab being the active selection. A 'New chat +' button is located on the right. The chat area shows a message from 'watsonx Agent' at 10:31 AM: 'Welcome to watsonx Agent' followed by the instruction 'Change this description to reflect your particular agent'. Below the text is a large image placeholder showing a network diagram with a magnifying glass icon. At the bottom, there is a text input field with the placeholder 'Type something...' and a send button.

CONCLUSION

The Digital Financial Literacy Agent is more than a chatbot; it is a vital tool for **economic empowerment and digital inclusion**. By leveraging AI to deliver trustworthy, accessible, and personalized financial guidance, it directly addresses the digital divide. This agent empowers users with the knowledge to protect themselves from fraud, build wealth, and confidently participate in the modern financial world.

FUTURE SCOPE

- Personalized Budgeting tools
- Proactive Alerts
- Gamified learning Modules
- Integration with banking apps
- Voice – Activated Interaction

IBM CERTIFICATIONS

In recognition of the commitment to achieve
professional excellence



Kalyannagu Pasupuleti

Has successfully satisfied the requirements for:

Getting Started with Artificial Intelligence



Issued on: Jul 15, 2025
Issued by: IBM SkillsBuild


Verify: <https://www.credly.com/badges/3612b831-38e3-45a0-88ad-c373ab52e9aa>



[RAG LAB certificate:](#)

IBM SkillsBuild

Completion Certificate



This certificate is presented to
Kalyannagu Pasupuleti

for the completion of
**Lab: Retrieval Augmented Generation with
LangChain**
(ALM-COURSE_3824998)

According to the Adobe Learning Manager system of record

Completion date: 31 Jul 2025 (GMT)

Learning hours: 20 mins

Git hub link : <https://github.com/kalyan6305/digital-financial-ai>

GITHUB LINK

- readme file link : <https://github.com/kalyan6305/digital-financial-ai/blob/main/README.md>



THANK YOU