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# **IBM PROJECT**

## **FINADVISOR – AI AGENT FOR DIGITAL FINANCIAL LITERACY**

**Presented By:-**

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**College Name & Department : K. J. Somaiya College of  
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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

Millions of citizens, especially beginners, rural users, and the elderly, face difficulty understanding and using digital financial tools like UPI, net banking, budgeting, loans, and government schemes. They are also vulnerable to online scams due to lack of awareness. Financial literacy resources are scattered, complex, and often inaccessible in regional languages, making it difficult for users to make informed and safe financial decisions.

## Proposed Solution:

An AI-powered Digital Financial Literacy Agent – FinAdvisor – that uses Natural Language Processing (NLP) and Retrieval-Augmented Generation (RAG) to provide users with personalized, safe, and simplified guidance on digital finance. It answers questions related to UPI, scams, loans, budgeting, and government schemes using real-time information from trusted sources (RBI, NPCI, Jan Dhan portals). With multilingual support and culturally sensitive design, it empowers users to confidently participate in the digital economy while staying protected from fraud.

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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

FinAdvisor empowers users with instant, trusted financial guidance, especially those who lack access to formal financial education. It promotes financial inclusion by making complex financial concepts easy to understand and accessible in multiple languages.

## Unique features:

- **Semantic search and RAG-based answers** from RBI, NPCI, and official portals
- **Multilingual support** for regional languages like Hindi, Telugu, etc.
- **Simplified explanations** for UPI, loans, budgeting, interest rates, and government schemes
- **Scam and fraud awareness tips**, including phishing and OTP misuse
- **Interactive financial learning** with examples, steps, and FAQs
- **Privacy-first approach**: never asks for Aadhaar, OTPs, or sensitive data
- **Personalized financial tips** based on user context (e.g., savings advice, EMI awareness)
- This AI agent builds **confidence in digital finance** while encouraging safer financial habits among all age groups.

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## END USERS

- Elderly citizens with low tech confidence
- Rural users and farmers
- Students learning finance basics
- Low-income families needing budgeting support
- Housewives managing household finance

# RESULTS

IBM watsonx

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New agent +

Deploy 🔗

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Build >

Agent preview

FinAdvisor 11:33 PM

Welcome to FinAdvisor

Aims to develop intelligent virtual assistant that enhances financial awareness and digital safety



Sample questions


How do I budget my monthly expenses?





What is the 50-30-20 budgeting rule?








Type something...






# RESULTS

 IBM watsonx


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 Build > Agent preview 



 You: 11:35 PM

How do I budget my monthly expenses?


 FinAdvisor 11:35 PM



Hi, I am FinAdvisor.ai. Budgeting your monthly expenses is a great way to manage your finances. Here are some simple steps to help you get started:







- 1. Identify your income:** Determine how much money you earn each month after taxes.
- 2. List your expenses:** Write down all your regular monthly expenses. These typically include:
  - Rent/Mortgage
  - Utilities (electricity, water, gas)
  - Groceries
  - Transportation (fuel, public transit, maintenance)
  - Healthcare (insurance, medications)
  - Debt payments (loans, credit cards)
  - Savings
  - Personal expenses (entertainment, hobbies, dining out)


 


# RESULTS

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 Build > Agent preview



- Personal expenses (entertainment, hobbies, dining out)

3. **Categorize your expenses:** Group similar expenses together to understand where your money goes.

4. **Set financial goals:** Decide what you want to achieve financially in the short and long term (e.g., saving for a vacation, paying off debt, building an emergency fund).

5. **Create a budget plan:** Allocate your income to cover necessary expenses, savings, and discretionary spending. There are various budgeting methods you can use, such as the 50/30/20 rule (50% needs, 30% wants, 20% savings) or the envelope system.



6. **Track your spending:** Keep a record of your actual expenses against your budget. This will help you identify areas where you may be overspending.

7. **Adjust your budget:** Make necessary adjustments to your budget as your financial situation or priorities change.

8. **Stick to your budget:** Consistency is key. Review and revise your budget regularly to stay on track.

For more detailed information, you can refer to financial literacy resources or budgeting apps available online. Remember, budgeting is a personal process, so find a method that works best for you.

[► How did I get this answer?](#)

Type something...  

# RESULTS

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Build > Agent preview


You: 11:39 PM  
What are the precautions to be taken for loans



FinAdvisor 11:39 PM  
Hi, I am FinAdvisor.ai. Taking loans can be a helpful financial tool when used responsibly. Here are some precautions to consider:  







- 1. Understand the loan terms:** Make sure you fully comprehend the interest rate (both nominal and effective), tenure, EMI (Equated Monthly Installment) amount, and any additional charges or fees.
- 2. Check your credit score:** Lenders often use credit scores to determine loan eligibility and interest rates. A higher score can lead to better terms.
- 3. Assess your repayment capacity:** Ensure that you can comfortably repay the loan without straining your finances. Include the EMI in your monthly budget.
- 4. Compare loan offers:** Look at different lenders (banks, NBFCs, fintech companies) to compare interest rates, processing fees, and other terms.
- 5. Avoid unnecessary loans:** Only borrow what you need and can afford to repay. Avoid taking loans for unnecessary expenses or lifestyle enhancements.


# RESULTS

## Deployed AI Agent

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[Deployment spaces](#) / [FinAdvisor](#) / [FinAdvisor](#) /      


FinAdvisor  Deployed Online

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

[New chat](#) +


 You 11:32 PM

How do I budget my monthly expenses?

 FinAdvisor 11:32 PM

Hi, I am FinAdvisor.ai. Budgeting your monthly expenses is a great way to manage your finances. Here are some simple steps to help you get started:

- 1. Identify your income:** Determine how much money you earn each month after taxes.
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  - Rent/Mortgage
  - Utilities (electricity, water, gas)
  - Groceries



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## CONCLUSION

FinAdvisor simplifies digital finance by providing clear, safe, and reliable guidance tailored to user needs.

It helps users make informed financial decisions, avoid scams, and better manage personal finances.

By automating the delivery of financial literacy through trusted sources and multilingual support, FinAdvisor promotes inclusion, trust, and confidence in the digital financial ecosystem.

This AI agent is a step toward building a financially aware and digitally empowered society.

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# FUTURE SCOPE

- Voice assistant integration (for elderly & low-literate users)
- Offline mobile app for rural & low-connectivity areas
- Gamified learning with rewards and quizzes
- Support for more Indian languages
- User dashboard for personalized financial tips

# IBM CERTIFICATIONS



In recognition of the commitment to achieve  
professional excellence



Ritika Dekate

Has successfully satisfied the requirements for:

Journey to Cloud: Envisioning Your Solution



Issued on: Jul 19, 2025

Issued by: IBM SkillsBuild

Verify: <https://www.credly.com/badges/c545723f-249d-492a-8d38-a3f80a48aea5>





IBM **SkillsBuild**

Completion Certificate



This certificate is presented to

Ritika Dekate

for the completion of

**Lab: Retrieval Augmented Generation with  
LangChain**

(ALM-COURSE\_3824998)

According to the Adobe Learning Manager system of record

**Completion date:** 26 Jul 2025 (GMT)

**Learning hours:** 20 mins

## GITHUB LINK

Git hub link : <https://github.com/Ritika-Dekate/FinAdvisor>



**THANK YOU**