



CODECELL-CMPN,VESIT

SYRUS HACKATHON 2025

Category Code: 02

Problem Statement Title: WealthSphere

Team Name: Flipflops

Institute Name: Vivekanand Education Society's Institute of Technology



Idea / Approach details (& implemented features)

WealthSphere is an AI-powered **Wealth & Asset Management** platform that helps users manage their budget, investments, risks, and future financial goals. It provides personalized insights, financial simulations, and AI-driven recommendations to improve decision-making.

Approach:

- AI Financial Agents: Specialized AI agents handle budgeting, investment planning, risk assessment, and retirement strategies.
- Smart Budgeting & Expense Tracking: Categorizes transactions, detects unusual spending, and offers budgeting insights.
- AI-Driven Investment & Risk Analysis: Analyzes market trends, portfolio risks, and suggests investment strategies.
- 'What-If' Simulations: Predicts financial outcomes for loans, investments, and major expenses.
- Life Event & Retirement Planning: Adapts financial plans based on life milestones and generates future wealth projections.
- AI-Generated Reports & Financial Literacy: Creates custom financial reports and educational content based on user needs.
- Conversational AI & Smart Alerts: A chatbot provides real-time financial guidance and alerts for overspending, investment opportunities, and goal tracking.



Innovation (Showstopper)

- **AI-Powered Financial Agents** – Specialized agents automate budgeting, investment planning, risk assessment, and retirement strategies, providing real-time, adaptive financial guidance.
- **'What-If' Simulations & Predictive Analytics** – Users can simulate future financial scenarios (e.g., taking a loan, changing investments) and get AI-driven risk analysis and recommendations.
- **AI-Generated Reports & Personalized Insights** – Generates custom financial reports, summaries, and educational content based on user spending patterns and investment behavior.
- **Conversational AI for Real-Time Assistance** – A smart chatbot provides instant financial advice, tracks expenses, and offers dynamic alerts on savings, investments, and potential risks.
- **Personalized Financial Health Score** – AI assesses financial habits, investment decisions, and risk profile, generating a unique score to help users optimize their wealth-building strategies.
- **Adaptive Planning for Life Events** – WealthSphere evolves with users' financial journeys, adjusting plans for milestones like marriage, home buying, or retirement.
- **AI-Driven Retirement Planning** – Personalized retirement savings strategies, pension fund recommendations, and future wealth projections to help users achieve long-term financial security.

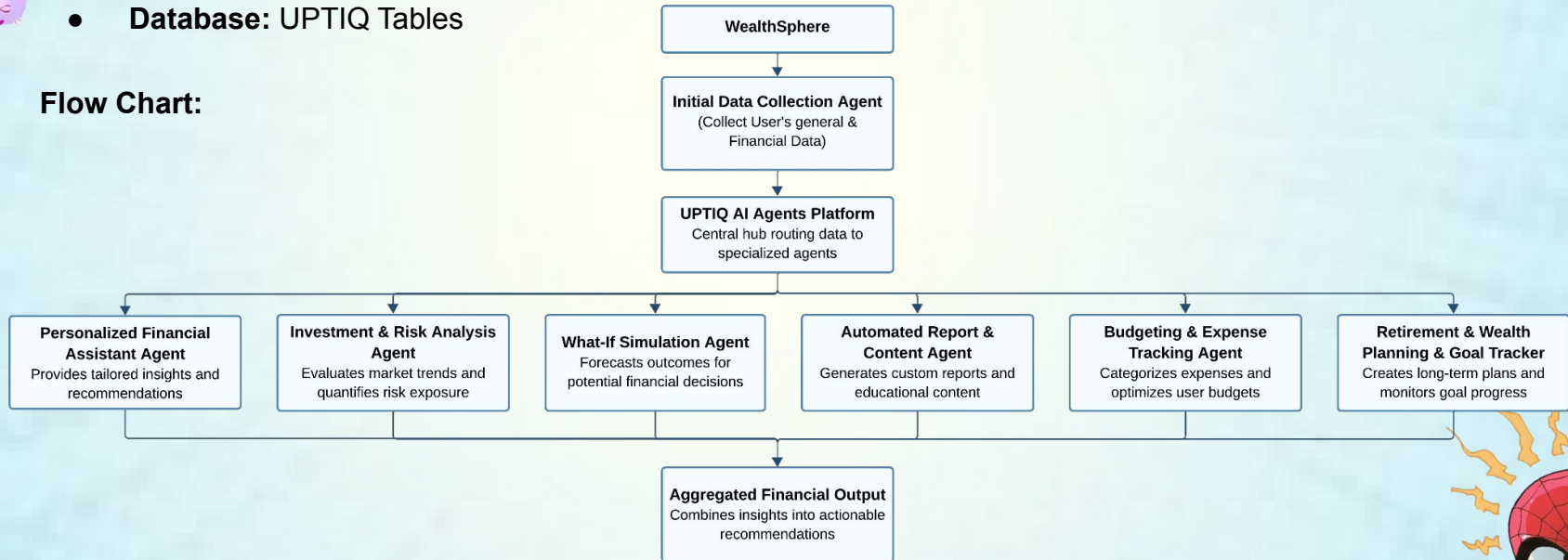


Tech Stack / Flowchart

Tech Stack:

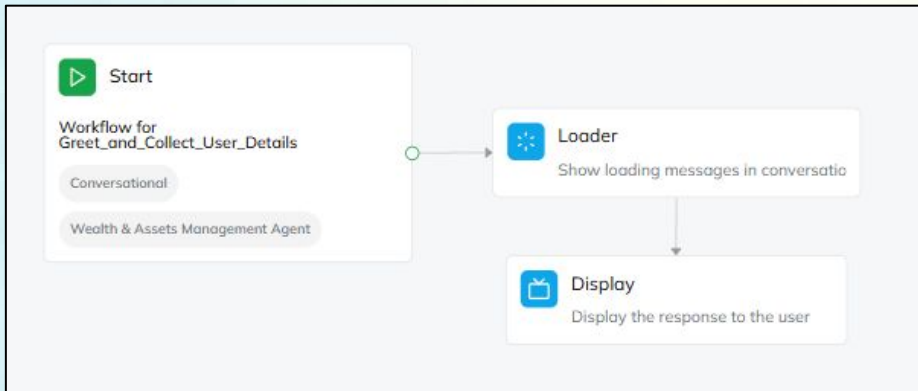
- **Agent Working:** UPTIQ AI Console
- **Database:** UPTIQ Tables

Flow Chart:

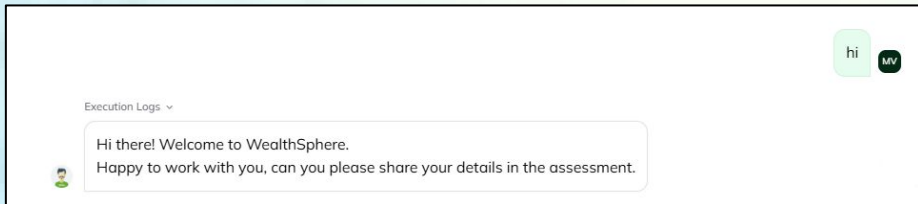


Implementation (Subagent: Greet User)

Workflow



Example



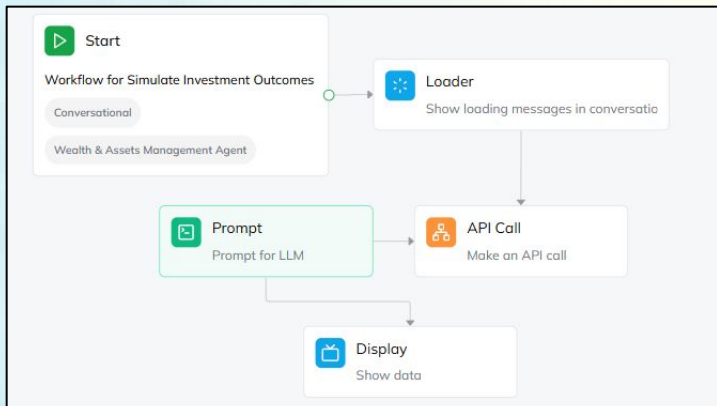
Explanation:

- The subagent greets the user and collects initial details for assessment.
- A loading message enhances interactivity before prompting user input.
- The system welcomes users to "WealthSphere," creating a personalized experience.
- This step ensures a smooth transition into the financial planning process.



Implementation (Subagent: What-if: Simple Investment Outcome)

Workflow



- The subagent analyzes different investment scenarios based on user inputs.
- It projects future value using initial savings, contributions, and expected returns.
- Helps users assess financial growth and make informed decisions.
- Provides insights on potential risks and returns for better financial planning.

Example Output

Can you simulate the outcome of investing in real estate? I currently have \$50,000 in savings, contribute \$1,500 every month, I'm 35 years old, and plan to retire at 65. What is my expected

Execution Logs ▾

Based on your investment scenario, here's an estimated simulation of the financial outcomes for investing in real estate:

1. **Initial Investment:** You have \$50,000 in savings.
2. **Monthly Contributions:** You plan to contribute \$1,500 every month.
3. **Investment Horizon:** You are currently 35 years old and plan to retire at 65, giving you a 30-year investment period.

Assuming a conservative annual return on your real estate investment of around 5%, here's the expected growth:

- **Future Value of Initial Investment:** The \$50,000 will grow over 30 years at 5%.
- **Future Value of Monthly Contributions:** Assuming you contribute \$1,500 monthly, this will also accrue interest at 5% annually, compounded monthly.

Using these parameters, the projected outcome can be calculated with the following formula for future value:

$$\text{Future Value (FV)} = \text{Initial Investment} \times (1 + r)^n + \text{PMT} \times \left[\frac{(1 + r)^n - 1}{r} \right],$$

where:

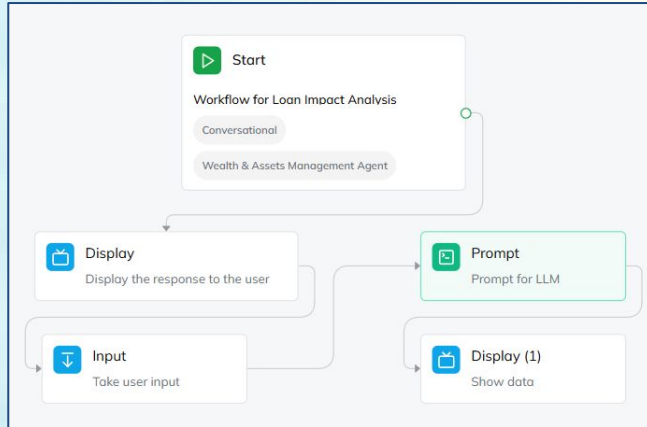
- PMT = monthly contribution
- r = monthly interest rate (annual rate / 12)
- n = total number of contributions (months)

After computation, your expected total value at retirement could range approximately between \$1.5 million and \$2 million, depending on market conditions and how consistently returns align with your investment strategy.

This projection indicates that strategic investing in real estate can significantly enhance your savings, leading to a robust retirement fund. For a more tailored


Implementation (Subagent: What-if: Loan Impact Analysis (Debt))

Workflow




- Evaluates loan repayment duration based on principal, interest rate, and EMI.
- Uses financial formulas to estimate total repayment time.
- Helps users plan and manage debt effectively.

Example Output

I have taken a loan of ₹5,00,000 at an interest rate of 10% per annum. I am paying ₹12,000 per month as EMI. How long will it take to repay the loan? 

Execution Logs ▾

Welcome to Debt Repaying Strategies.
Please provide, Amount, Interest Rate & Monthly Payment.

I want to repay a debt can you help? 

Execution Logs ▾

To calculate the total repayment period for your loan of ₹5,00,000 at an interest rate of 10% per annum with a monthly EMI of ₹12,000, we can use the following formula to determine the number of months required to repay the loan:

1. Calculate the Monthly Interest Rate:
$$r = \frac{10\%}{12} = \frac{0.10}{12} \approx 0.00833$$
2. Calculate the Number of Months (n):
The formula for calculating the number of months to repay a loan is:
$$n = \frac{\log(\frac{EMI}{EMI - P \cdot r})}{\log(1 + r)}$$

Where:

 - (P) is the principal amount (₹5,00,000)
 - (r) is the monthly interest rate (0.00833)
 - (EMI) is the monthly payment (₹12,000)

Plugging in the numbers:

$$n = \frac{\log(\frac{12000}{12000 - 500000 \cdot 0.00833})}{\log(1 + 0.00833)}$$

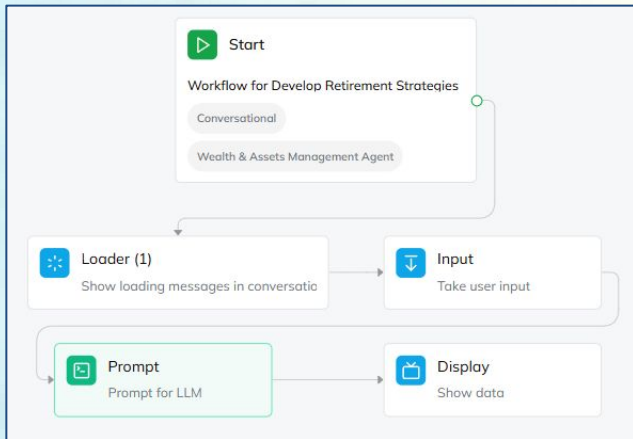
Calculating:

$$n = \frac{\log(\frac{12000}{12000 - 4166.67})}{\log(1.00833)} \approx \frac{\log(\frac{12000}{7833.33})}{\log(1.00833)} \approx \frac{\log(1.530)}{\log(1.00833)} \approx \frac{0.184}{0.0036} \approx 51.11$$

So, it will take approximately 52 months to repay the loan.

Implementation (Subagent: Retirement Plan)

Workflow



- Creates a personalized retirement plan.
- Estimates future savings and investment growth.
- Recommends investment options and risk strategies.
- Guides on annual reviews for financial stability.

Example Output

Execution Logs -

Your Personalized Retirement Strategy

Sure! Let's create a retirement plan for you that outlines a strategy for your age, current savings, contributions, potential investment vehicles, and risk tolerance. Given that you are currently 18 years old, want to retire at 60, and currently have no savings, we'll build this plan step by step.

1. Set Your Retirement Goals

- Retirement Age: 60
- Current Age: 18
- Years Until Retirement: 42 years

2. Monthly Contributions

- Initial Monthly Contribution: Start with a contribution of \$200 per month.
- Increase Contribution: Plan to increase the contribution by 5% each year to match inflation and increases in income.

3. Potential Investment Vehicles

- Tax-Advantaged Accounts:
 - Roth IRA: Consider contributing to a Roth IRA, where contributions are made with after-tax dollars, but withdrawals during retirement are tax-free. The annual contribution limit as of 2023 is \$6,500.
 - 401(k): If available through an employer, contribute enough to get any matching contribution for free money. Aim for the maximum annual contribution.
- Investments:
 - Stock Market: Invest in a diversified portfolio of low-cost index funds or ETFs that track the stock market. Generally, a mix of 80% equities and 20% bonds can provide good growth potential.
 - Real Estate Investment Trusts (REITs): Consider them for potential income and diversification.
 - Bonds: As you get closer to retirement, gradually shift to more conservative investments to preserve capital.

4. Risk Tolerance Guidelines

- Long-term Risk Tolerance: At age 18, you can afford to take a higher risk with a greater allocation towards stocks since you have time for recovery from market downturns.
- Adjustment Over Time: As you age and approach retirement, gradually reduce stock exposure and increase bond exposure to mitigate risk.

5. Projected Growth Calculation

Assuming a conservative annual return rate of 7% from your investments:

- Monthly Contribution Growth:
 - Initial: \$200 per month
 - Compounding Monthly for 42 Years:

$$[FV = P \times \frac{1}{r} \times ((1 + r)^n - 1)]$$

Where:

- (FV) = Future Value of the investment
- (P) = Monthly contribution (\$200)
- (r) = Monthly rate of return (0.07/12 = 0.0058333)
- (n) = Total number of contributions (42 years * 12 months = 504 months)

Calculation

Using an online retirement calculator:

1. Total Contributions Without Growth:
 - Total Contributions = \$200 * 504 months = \$100,800
2. Future Value with Growth:
 - $FV = \$200 * (\frac{1}{0.0058333}) * ((1 + 0.0058333)^{504} - 1)$
 - $FV = \$200 * 108.4070$ (approx.) = \$21,681.40 (this represents the growth over time)

Final Total Savings: \$100,800 (original contributions) + \$21,681.40 (interest) = \$122,481.40 approx.

6. Review and Adjust Annually

- Review your contributions and investment performance annually.
- Adjust your monthly contributions upwards if possible, especially when you receive raises or bonuses.

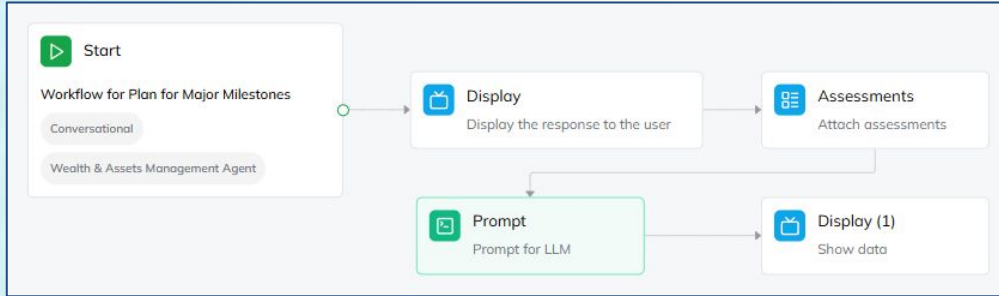
7. Additional Considerations

- Keep an eye on inflation and your living expenses.
- Stay informed about tax implications of your savings and investments throughout the years.
- Consider professional financial advice, especially as you get closer to retirement.

This comprehensive approach sets you on a solid path toward a secure retirement! If you have any specific questions or variations you'd like to consider, feel free to ask!

Implementation (Subagent: Life Event Planner Simulator)

Workflow:



- **Goal-Based Financial Planning** – Helps users plan major milestones like buying a house by considering their savings, income, and financial goals.
- **Personalized Strategy** – Generates tailored investment and savings strategies to reach targets efficiently.
- **Step-by-Step Timeline** – Provides a structured roadmap, breaking down actions users should take each year to achieve their goal.
- **Risk Assessment** – Highlights potential risks such as market fluctuations, interest rate changes, and unexpected expenses.
- **Interactive Guidance** – Engages users with a simulator that adjusts recommendations based on their inputs, ensuring a customized financial roadmap.



Implementation (Subagent: Life Event Planner Simulator)

Example:

Execution Logs ▾

Welcome to the Life Events Simulator!
We'll walk you through some key decisions and show how they shape your future.
Let's start with a few questions.

Please fill the form.

User Goal
What is your goal to achieve?

Savings
How much can you save each month?

Total Savings
How much have you saved?

Monthly Income
Kindly share your Monthly (inhand) income

Clear

Execution Logs ▾

Life Event Planner for Buying a House in 5 Years

Initial Overview:

- Budget for House Purchase: ₹30,000,000 (Assuming this is for total costs, including down payment, taxes, maintenance, etc.)
- Monthly Income: ₹15,000
- Timeframe: 5 Years (60 months)
- Savings Goal: It's generally suggested to save at least 20% of the house's price for a down payment.

Financial Growth Strategy

1. Monthly Savings:

- Aim to save at least 20-30% of your monthly income to build a house fund.
- Savings per month = $₹15,000 \times 30\% = ₹4,500$
- Total savings in 5 years = $₹4,500 \times 60 = ₹270,000$

2. Investment Strategy

- Fixed Deposits/Recurring Deposits: To earn some interest on your savings. This may yield 6-7% annually.
- Mutual Funds: Consider low-risk mutual fund options to grow savings over time.
- Estimate the potential growth from investments during this period. If you invest ₹4,500 a month, this could grow significantly depending on returns.

3. Emergency Fund:

- As you save, build an emergency fund for unexpected circumstances (aim for 3-6 months' worth of expenses).

Major Life Events Timeline

1. Year 1:

- Assess your current living situation.
- Create a budget to identify areas to save more.
- Explore different house options and markets.

2. Year 2:

- Attend homebuyer workshops or financial education sessions.
- Start reducing unnecessary expenses.
- Begin saving more if income increases or additional sources (freelance work, etc.) are opened.

3. Year 3:

- Reevaluate savings and investments.
- Set up automatic transfers to savings/investment accounts.

Major Life Events Timeline

1. Year 1:

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3. Year 3:

- Reevaluate savings and investments.
- Set up automatic transfers to savings/investment accounts.
- Research preferred neighborhoods and local real estate trends.

4. Year 4:

- Get a pre-approval for a mortgage based on saved amount and credit score.
- Explore areas of potential purchase and visit different properties.
- Prepare for additional costs such as closing fees, insurance, and property taxes.

5. Year 5:

- Maintain regular savings while preparing for the actual purchase.
- Finalize your budget and start serious house hunting.
- Negotiate and finalize the purchase of your home.
- Plan for moving expenses, renovations, and first-month expenses post-move.

Risks to Consider:

1. Market Fluctuations:

- Housing prices can rise due to economic changes. Monitor trends actively.

2. Job Stability/Income Changes:

- Maintain savings if an unexpected job loss occurs.

3. Interest Rates:

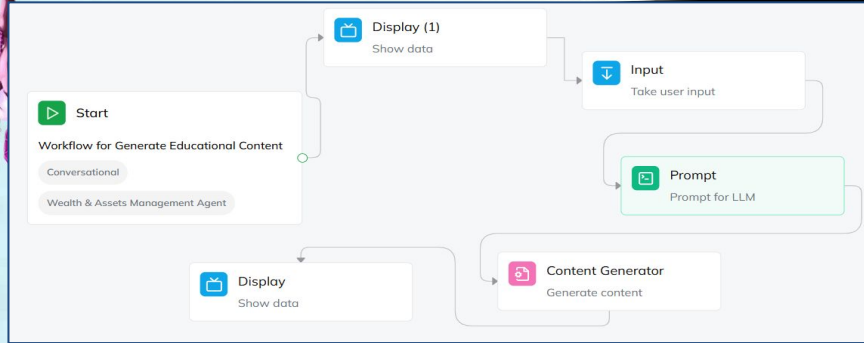
- Mortgage rates can fluctuate, making homes more expensive in the long run.

4. Unexpected Costs:

- Always have a cushion above the expected costs for maintenance and repairs after purchase.

Implementation (Subagent: Financial Literacy Content Creator)

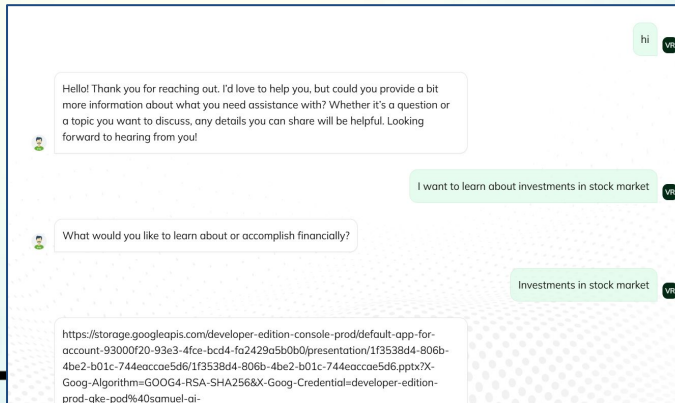
Workflow



Execution log

	Input Started on Mar 28, 11:51 AM for 11368 milliseconds Asked user for input. User: Investments in stock market	View Details
	Prompt Started on Mar 28, 11:51 AM for 8916 milliseconds Prompted model GPT 4o mini (Azure) with query: Generate content for given topic	View Details
	Content Generator Started on Mar 28, 11:52 AM for 2721 milliseconds Generated content using template: 7100ddc9-423e-45ec-ba95-27c8b8dd9efb	View Details
	Display Started on Mar 28, 11:52 AM for 234 milliseconds	View Details

Financial Literacy Content Creator



PDF created by the agent

Introduction to Investments in the Stock Market

Understanding the Basics of Stock Market Investments

What is the Stock Market?

- A collection of markets where shares of publicly held companies are traded.
- Facilitates the buying, selling, and issuance of shares.

Why Invest in the Stock Market?

- **Potential for High Returns**: Historically, stocks have provided higher returns compared to other investment options.
- **Ownership in Companies**: Purchasing stocks means owning a piece of a company.
- **Dividend Income**: Some stocks pay dividends, providing additional income.

Types of Investments in the Stock Market

1. **Common Stocks**:
 - Represents ownership in a company with voting rights.
 - Higher potential for gains but more volatile.
2. **Preferred Stocks**:
 - Priority over common stocks for dividends and during liquidation.
 - Less volatility but no voting rights.



Implementation (Subagent: Financial Literacy Content Creator)

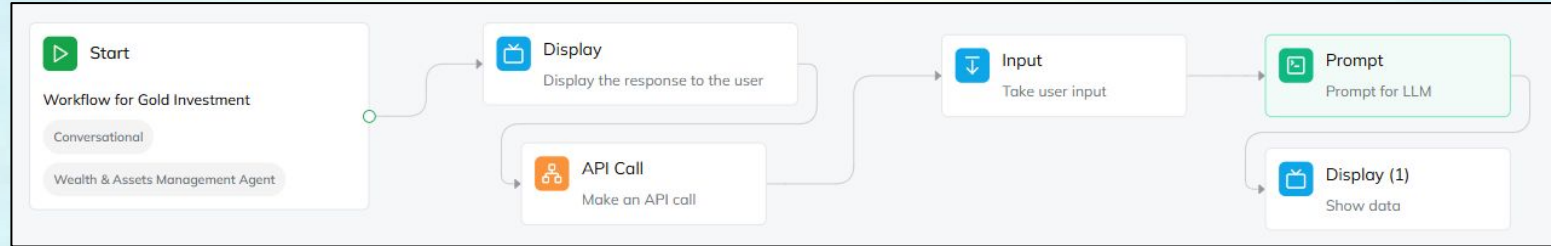
Explanation:

1. **Start (Trigger Node):** Initiates the workflow for generating educational content. The workflow is categorized as "Conversational" and linked to a "Wealth & Assets Management Agent," indicating the focus on financial education.
2. **Display (1) - Show Data:** Displays initial information, possibly an introduction or available options for the user.
3. **Input - Take User Input:** Collects user input, which may include a query or topic selection for generating educational content.
4. **Prompt - Prompt for LLM:** The user input is processed into a structured prompt for the Large Language Model (LLM). Ensures that the AI understands the context and generates relevant responses.
5. **Content Generator - Generate Content:** We create a template for our pdf with fields for title, subtitle and content from LLM and generates a link for a PDF.
6. **Display - Show Data:** Displays the URL of the PDF created.



Implementation (Subagent: Asset Allocation: Gold Assets)

Workflow




Explanation:


- **Investment Analysis** – Assesses finances to distinguish between standard and gold investments, outlining benefits and risks.
- **Gold Return Calculation** – Estimates potential gold returns based on available funds and historical trends.
- **Tailored Asset Allocation** – Recommends an optimal mix of gold and other assets for diversified wealth growth.
- **Conversational & API Insights** – Uses a chat interface and API data for personalized, real-time investment guidance.



Implementation (Subagent: Asset Allocation: Gold Assets)


Output Example



I want to invest in gold. 

Execution Logs ▾






What would you like to know or achieve regarding Gold Investments?

I have Rs.10000 how much gold can i buy with it? depending on the current rate of gold. 

Execution Logs ▾

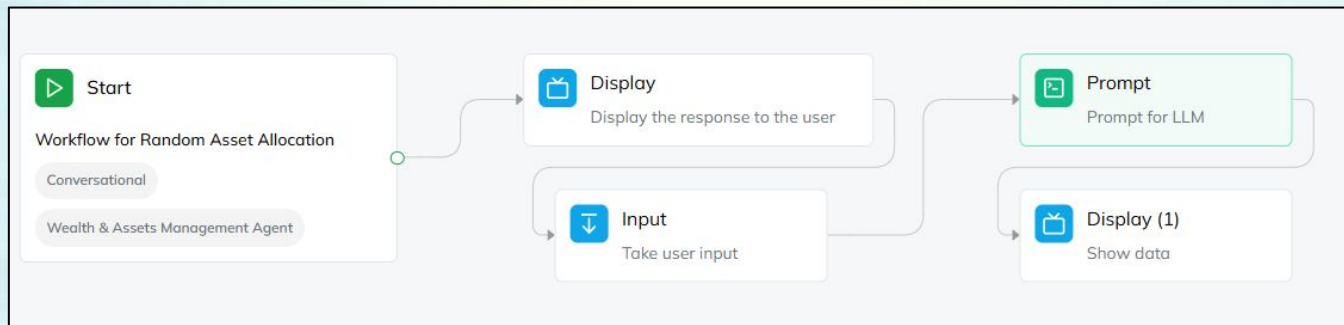
To determine how much gold you can buy with Rs. 10,000, we first need to convert the current gold rate from US dollars to Indian rupees.
The current gold price is approximately \$3085.20. Assuming the exchange rate is around ₹80 to 1 USD (you may need to check the current rate), the gold price in rupees would be:
 $\text{Gold price in INR} = \$3085.20 * ₹80 \approx ₹246816$ (Please confirm with the exact exchange rate for precision)
Now, to find out how much gold you can purchase with Rs. 10,000:
 $\text{Amount of gold you can buy} = \text{Rs. } 10,000 / ₹246816 \approx 0.0405 \text{ grams}$
So, with Rs. 10,000, you can buy approximately 0.0405 grams of gold at the current rate.

Execution Logs

-  **Input** View Details
Started on Mar 28, 9:34 PM
Asked user for input. User: I want to invest in gold.
-  **Pass Through** View Details
Started on Mar 28, 9:38 PM for 325 milliseconds
Passed through to the next task
-  **JavaScript** View Details
Started on Mar 28, 9:38 PM for 389 milliseconds
Executed a custom code: JS Function
-  **Workflow** View Details
Started on Mar 28, 9:38 PM for 11100 milliseconds
Started a child workflow: Workflow for Gold Investment
-  **Display** View Details
Started on Mar 28, 9:38 PM for 233 milliseconds
Displayed a message: `<p>What would you like to know or achieve regarding Gold Investments?</p>`

Implementation (Subagent: Asset Allocation: Random Assets)

Workflow




Explanation:

- **Asset Diversification** – Distributes funds randomly across various asset classes to ensure a balanced investment portfolio.
- **Risk & Return Estimation** – Provides insights into potential risks and returns based on the randomized allocation.
- **Flexible Investment Strategies** – Suggests varied asset mixes tailored to different financial goals and risk tolerances.
- **Conversational & API Insights** – Uses a chat interface and real-time data integration to generate personalized, dynamic asset allocation.



Implementation (Subagent: Asset Allocation Random Assets)

Output Example

I want to distribute my money randomly across different assets. 



Welcome to the Random Asset Allocation Assistant! Share your asset types, count, and risk level to begin.

How should I split \$5,000 among various investment options with high risk? 

Here's a random asset allocation suggestion for splitting \$5,000 among various high-risk investment options:

1. **Cryptocurrencies: \$1,500 (30%)**
 - Consider investing in a mix of established coins (like Bitcoin and Ethereum) and a few altcoins.
2. **Technology Stocks: \$1,500 (30%)**
 - Focus on high-growth tech companies or ETFs that track tech indices.
3. **Emerging Markets: \$1,000 (20%)**
 - Invest in an emerging market ETF to capture growth in developing regions.
4. **Peer-to-Peer Lending: \$500 (10%)**
 - Use platforms for lending to individuals or small businesses to potentially earn higher returns.
5. **Startup Equity or Crowdfunding: \$500 (10%)**
 - Allocate to crowdfunding platforms that allow you to invest in startups or small businesses.

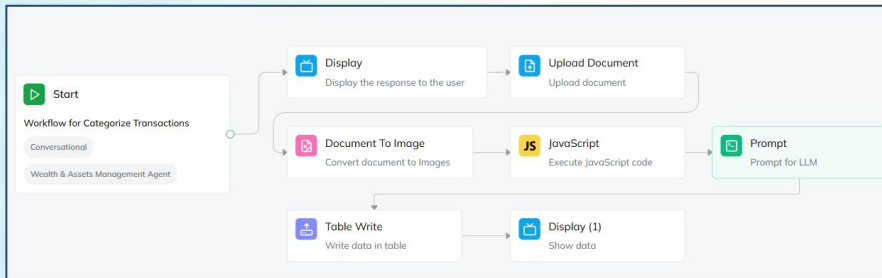
Total: \$5,000

Disclaimer: This allocation is a suggestion and not financial advice. Always do your own research and consult a financial advisor tailored to your individual situation before making investment decisions. High-risk investments can lead to significant losses as well as gains.



Implementation (Subagent: Categorize Transactions)

Workflow



Example

The example shows a chat interface with a user asking to categorize transactions. The assistant responds with a greeting and a request to upload a CSV file. The user uploads a file named 'sample_transactions.csv'. The assistant then displays a JSON response containing transaction data and a confirmation message.

Hi, I want to categorize transactions

Hello there, please upload your transactions in CSV format.

Please upload your file

sample_transactions.csv
Text

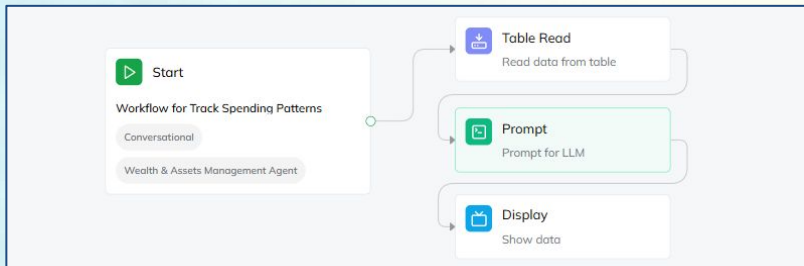
```
{
  "acknowledged": true,
  "insertedCount": 20,
  "insertedIds": [
    "0",
    "b93cab3e-53bf-4309-b43d-5e777e667fb3",
    "1",
    "159f129d-4918-4fbd-a513-c5aaabcc723f",
    "2",
    "475725eb-a06b-43a3-bfcf-f5d6baeabb62",
    "3",
    "74e8d171-ff1b-4b77-9be8-e30acbb44eac",
    "4",
    "92a9c15d-0152-466c-a30c-"
  ]
}
```

Explanation:

- The subagent asks the user to categorize transactions and upload a CSV file.
- A loading message ensures a smooth user experience.
- The CSV file is converted into an image for processing.
- A JavaScript node extracts data from the image and converts it back to CSV format.
- The prompt node structures the extracted data for database insertion.
- The write table node stores the categorized transaction data.
- This process automates and simplifies transaction categorization efficiently.

Implementation (Subagent: Spending Patterns)

Workflow



Example

I want to track my spending patterns

Financial Transaction Analysis: Overspending Detection Overview

In this analysis, we will examine individual transactions categorized under discretionary spending areas such as Entertainment, Shopping, and Food, as well as high-value transactions in other categories. We will identify any instances of potential overspending by comparing these transactions against the usual spending patterns.

Flagged Transactions

- Entertainment**
 - Transaction: Movie Tickets
 - Amount: \$75
 - Date: October 15, 2023
 - Normal spending range: \$20-\$30 per outing
 - Analysis: The purchase of movie tickets at \$75 significantly exceeds the normal range for entertainment spending. This transaction indicates overspending as it represents more than double the typical expenditure for similar experiences.
- Food**
 - Transaction: Dining Out (Restaurant)
 - Amount: \$120
 - Date: October 12, 2023
 - Normal spending range: \$40-\$60 for dining out
 - Analysis: Spending \$120 at a restaurant is approximately double the habitual expenditure for this category. This is indicative of possible

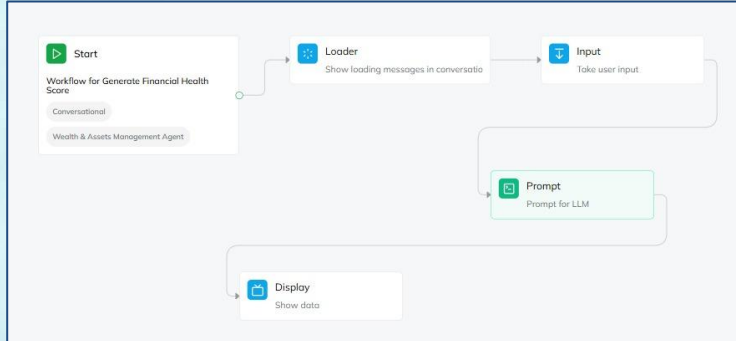
Explanation:

- **User Interaction:** The agent welcomes the user and initiates a conversation about tracking their spending habits.
- **Table Read Node:** Retrieves transaction data from the database for analysis.
- **Prompt Node:** Processes the data using an LLM to analyze spending patterns, trends, and financial habits.
- **Display Node:** Presents insights visually, helping users understand their spending behavior.
- **Outcome:** The user receives structured insights on their spending habits, enabling better financial decisions.



Implementation (Subagent: Financial Health Score)

Workflow



Explanation

- Calculating Financial health score based on monthly income, total debt, monthly expenses and total savings

Example:

Help me calculate my financial health score Data: - Monthly Income: 5000 - Monthly Expenses: 3000 - Total Debt: 10000 - Total Savings: 20000

calculated financial health score and explanation to the user.

Let's calculate your financial health score based on the provided data:

Data:

- Monthly Income: \$5000
- Monthly Expenses: \$3000
- Total Debt: \$10000
- Total Savings: \$20000

Calculations:

- Net Cash Flow: Net Cash Flow is calculated as:
 - Net Cash Flow = Monthly Income - Monthly Expenses
 - Net Cash Flow = 5000 - 3000 = 2000
- Savings Rate: The Savings Rate is the percentage of income that is saved:
 - Savings Rate = ((Net Cash Flow) / Monthly Income) * 100

Implementation (Workflow for Financial Health Score)

Explanation:

- **Net Cash Flow:**
 - i. *Calculation:* Monthly Income – Monthly Expenses
 - ii. *Indicates:* Whether you're living within your means.
- **Savings Rate:**
 - i. *Calculation:* $((\text{Monthly Income} - \text{Monthly Expenses}) / \text{Monthly Income}) \times 100$
 - ii. *Indicates:* The percentage of income saved.
- **Debt Burden (Debt-to-Income Ratio):**
 - i. *Calculation:* Total Debt / Monthly Income
 - ii. *Indicates:* How manageable your debt is relative to your income.
- **Savings Cushion:**
 - i. *Calculation:* Total Savings / Monthly Expenses
 - ii. *Indicates:* The number of months you can cover expenses (ideal: 3–6 months).



Decided Uptiq Agents

WealthSphere uses multiple **UPTIQ AI Agents** for various financial tasks:

- **Personalized Financial Assistant Agent** – Provides real-time insights, alerts, and personalized recommendations.
- **Investment & Risk Analysis Agent** – Tracks market trends and suggests optimal investment strategies.
- **"What-If" Simulation Agent** – Predicts financial outcomes for major decisions like loans, investments, and big purchases.
- **Automated Report & Content Agent** – Generates personalized financial reports and educational content based on user data.
- **Smart Budgeting & Expense Agent** – Categorizes transactions, detects unusual spending, and optimizes budgeting.
- **Retirement & Wealth Planning Agent** – Creates AI-driven retirement plans and future wealth projections.



Uptiq Agent (Subagents) Implemented

- **"What-If" Simulation (Investment & Loan Strategies):** Simulates financial scenarios to predict investment returns and calculate loan repayments, including EMI schedules, prepayment benefits, and total interest over time.
 - **Investment:** Simulate potential returns from different investment options (e.g., stocks, mutual funds, bonds).
 - **Loan Strategies:** Automatically calculates monthly EMI (Equated Monthly Installment) amounts, total loan payments, and schedules.
- **Retirement Planning:** Estimates retirement needs based on lifestyle choices, suggests savings plans and investments, and adjusts goals dynamically based on income, expenses, and inflation.
- **Spending Habit Analysis (Budget Categorization):** Categorizes transactions into spending categories, tracks trends, identifies overspending, and provides budgeting insights and alerts for unusual transactions.
- **Life Events Planning:** Helps plan major life milestones (e.g., buying a house, starting a business) with financial roadmaps, required savings, and impact assessments.



Uptiq Agent (Subagents) Implemented

- **Asset Management (Gold & Other Assets):** Tracks assets like gold and real estate, monitors value fluctuations, provides investment insights, and suggests diversification strategies.
 - **Gold Assets:** Tracks the market value of gold and informs users whether it's a good time to invest.
 - **Other Assets:** Recommends various investment options (such as stocks, real estate, bonds) for users to consider.
- **Financial Health Score:** AI-powered score that evaluates debt-to-income ratio, savings rate, credit score impact, and provides recommendations to improve financial well-being.
- **Educational Content:** Generates personalized content on investment strategies, loan management, wealth-building, and real-time market insights.



Future Objectives

- **Database Integration** – Develop a structured database to securely store user financial data, transaction history, and personalized insights, enabling faster retrieval and analysis.
- **RAG (Retrieval-Augmented Generation)** – Implement a system that combines AI-generated responses with real-time financial data, ensuring more accurate and up-to-date investment insights, risk assessments, and budgeting suggestions.
- **Risk Mitigation Strategy** – Build an AI-powered risk assessment module that identifies potential financial risks, such as market downturns, excessive debt, or poor investment choices, and provides proactive recommendations.
- **Personalized Reports** – Generate dynamic, user-specific financial reports with insights on spending habits, investment performance, savings projections, and risk evaluations, tailored to individual goals and preferences.

