Retail Research Assistant Workflow

Objective

Provide clear, actionable, and multi-dimensional insights on any financial query by acting as a smart co-pilot for retail investors.

This is the core Q&A interface — users ask anything, from stock-specific queries to macroeconomic questions.

Sub-Agent Orchestration Logic

Flow:

1. Head Agent receives user query → classifies intent (`macro` , `company` , `sector` , `event` , etc.)
2. Based on classification → routes task to the appropriate set of sub-agents
3. Sub-agents return structured outputs (summary, scores, charts, citations)
4. Head Agent synthesizes final response (TL;DR + expanded insight)

Agent Breakdown

Agent	Trigger Condition	Purpose
`NewsAgent`	Always	Provides recent, relevant news context
`SentimentAgent`	Always	Gauges social + community mood
`EarningsAgent`	On company queries	Pulls financial performance from earnings reports
`ValuationAgent`	On company queries	Gives valuation metrics and pricing view
`MacroAgent`	On macro / sector / country	Understands global indicators, monetary policy, trends
`RiskAgent`	On company or sector queries	Flags legal, structural, or market risks

Expected Output Schema

```
{
  "summary": "TL;DR answer in plain English",
  "agent_cards": {
    "news": { "headlines": [], "summary": "..." },
    "sentiment": { "score": 0.7, "trend": "bullish" },
    "earnings": { "eps": "2.3", "revenue_growth": "15%" },
```

```
    "valuation": { "pe": 18.3, "target_price": 310 },
    "macro": { "trend": "disinflationary", "interest_rates": "stable" },
    "risk": { "score": 3.2, "notes": "..." }
  },
  "sources": ["newsapi.org", "reddit", "tradingeconomics"]
}
```

Example Prompts

- "What's happening with Infosys lately?"
- "Why is the Indian auto sector rallying?"
- "What does the RBI rate hike mean for banks?"
- "Is HDFC Bank overvalued right now?"
- "Compare TCS vs Infosys from a valuation and earnings perspective"

Future Enhancements

- Add plain-English explainers for any term (ROE, EPS, etc.)
- Integrate charts and heatmaps per agent card
- Save favorite stocks and watchlist-based auto reports
- Add voice input support
- Plugin for portfolio-level summaries