Portfolio Analyzer Workflow

Objective

Analyze and evaluate a user's current investment portfolio using AI agents. Identify strengths, weaknesses, risk exposure, and suggest intelligent rebalancing and improvements.

Our goal is to give every investor an intelligent research analyst who can: - Audit your portfolio's fundamentals and diversification - Flag red flags and imbalances - Recommend improvements based on goals and risk - Educate the user as they go

This is a personalized, one-click portfolio insight engine, not a general chatbot.

How Users Interact

- User connects portfolio (via broker or CSV upload)
- Agent extracts holdings, weightages, and historical trades
- AI agents go to work analyzing each component
- Head agent compiles the analysis and offers an easy-to-understand insight pack
- User can ask questions like:
- “What’s the weakest stock here?”
- “Where am I overexposed?”
- “Should I trim X or add more Y?”

Sub-Agent Orchestration Logic

Flow:

1. Portfolio data (tickers, weights, buy prices) is received
2. Head Agent calls:
3. `EarningsAgent` + `ValuationAgent` to analyze financial health of each stock
4. `SentimentAgent` + `TranscriptAgent` for market view and management credibility
5. `RiskAgent` flags issues like high volatility, lawsuits, weak cashflows
6. `BalanceSheetAgent` + `CashflowAgent` to assess financial resilience
7. `DiversificationAgent` checks overexposure (sector, region, market cap)
8. `GoalFitAgent` evaluates if portfolio matches investment goals
9. `BehavioralAgent` identifies emotional patterns or bad habits
10. `ScenarioAgent` simulates changes or stress scenarios
11. Head Agent synthesizes the findings and outputs:
12. Summary report
13. Highlighted insights (good & bad)
14. Suggested actions

Agent Breakdown

Agent	Purpose
`EarningsAgent`	Evaluates earnings quality and momentum
`ValuationAgent`	Determines if holding is over/undervalued
`SentimentAgent`	Understands current market emotion about holdings
`TranscriptAgent`	Looks at management tone in recent calls
`RiskAgent`	Flags high-risk positions (debt, legal, volatility)
`BalanceSheetAgent`	Reviews assets, liabilities, solvency
`CashflowAgent`	Checks if company generates real cash
`DiversificationAgent`	Checks for overconcentration in sector/region/style
`GoalFitAgent`	Matches portfolio design to long-term goals
`BehavioralAgent`	Detects patterns of emotional or poor decision making
`ScenarioAgent`	Simulates what-if conditions on portfolio outcome

Output Schema

```
{
  "summary":
"Your portfolio is solid in earnings growth, but exposed to mid-cap tech
volatility. Consider trimming 2 names.",
  "overexposure": ["Tech (56%)"],
  "high_risk": ["StockA (low FCF)", "StockB (high debt)"]
}
```

Visual Design Philosophy

- Dashboard style interface
- Portfolio pie chart + sector bar + region split
- Highlight risky holdings in red, strong ones in green
- Actionable cards: Trim, Hold, Double Down, Exit, Replace
- Chat window to ask deeper questions to the agent

Example Use Cases

- "I uploaded my Groww portfolio and it told me to exit 1 stock, trim 2, double down on 1."
- "My risk score is higher than average. How can I reduce it?"
- "I'm overweight Tech and missed opportunities in Healthcare."

Future Enhancements

- Connect with Zerodha, Groww, or smallcase for live sync
- Show historical returns, alpha vs benchmark
- Suggest ETFs to rebalance exposure
- Include advisor-style disclaimers
- Build an AI-based scoring model per stock
- Send monthly update reports

Power Features (Planned)

Feature	Description
`Behavioral Analysis Agent`	Identifies user patterns (e.g., panic selling, overtrading) and flags emotional investing behavior
`Goal-Based Matching`	Matches each asset with your defined financial goals to recommend retention or rebalance
`What-If Simulator`	Lets users simulate scenarios like “What if I move 20% into Pharma?” or “What if inflation rises?”
`Peer Comparison`	Compares user's portfolio to similar demographic investors or top performers
`Narrative Generator`	Generates a plain-English rationale per stock to explain “why you own it” and “what changed”

Let’s empower every retail investor to think and act like a pro.

Want to add diagrams or mockups next?