



FINTRASYNC

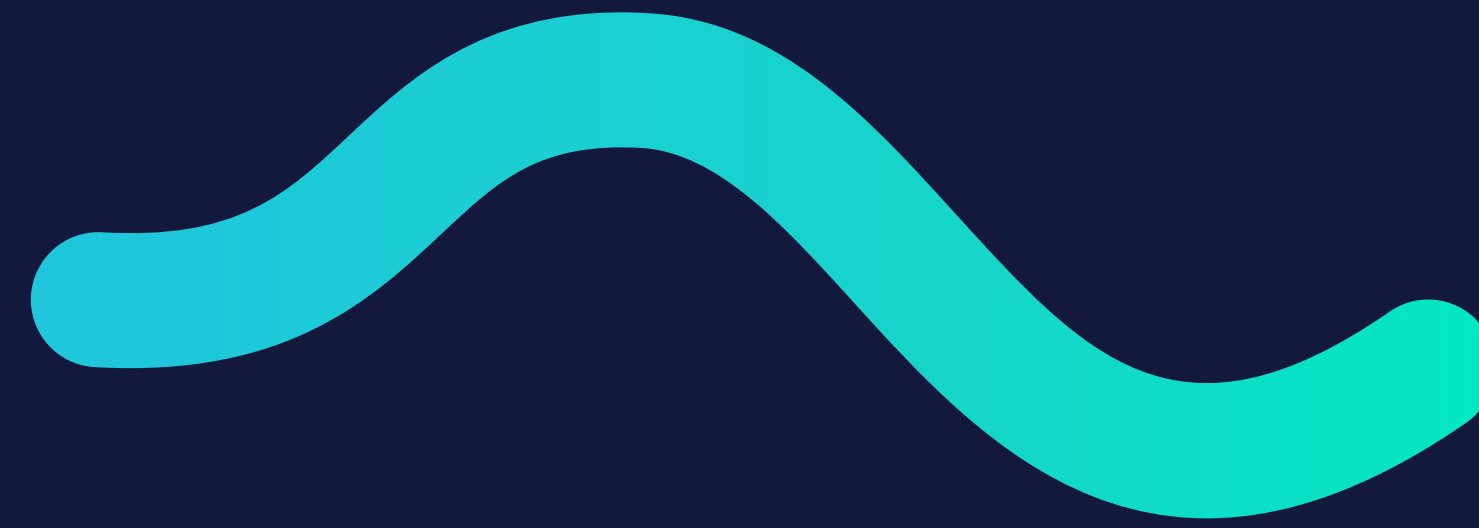
Take charge of your personal investments

Let's Start

Brahma P. Sen
Akhil Gogineni
Kaushik Sampath
Shams ul Hassan

July 2025

The PROBLEM



LACK OF PERSONALIZED FINANCIAL ADVICE

- Difficulty tracking Stock performance and relevant news
- Hidden risks (fraud/insider trading) go unnoticed
- Complete Portfolio and Scenario Analysis

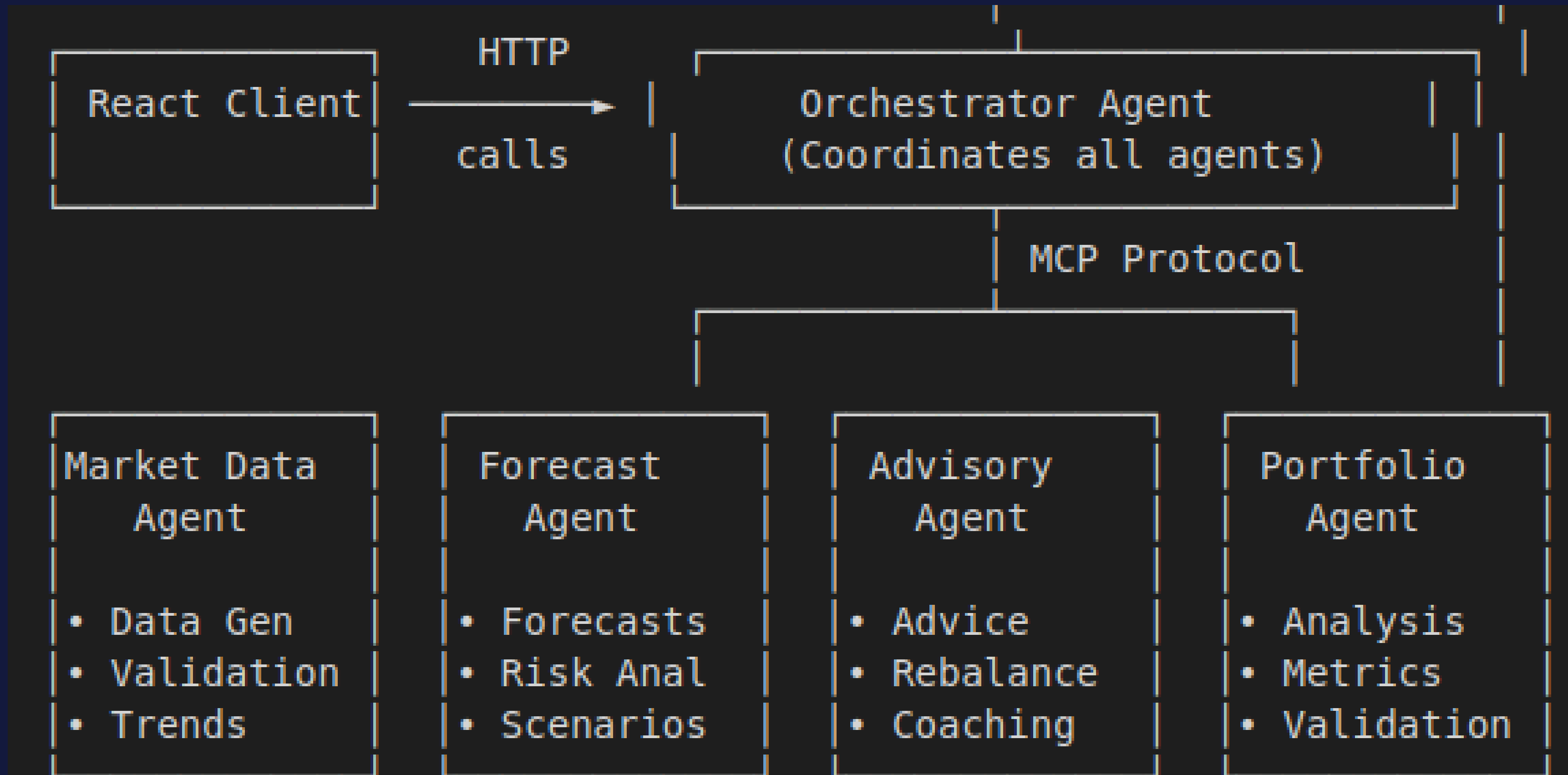
The SOLUTION



A personalized, Agentic AI Finance companion

- A mobile interface for easy access
- Portfolio forcecast analysis, Investment advice based on risk profile
- Complete Portfolio and Scenario Analysis

ARCHITECTURE




TECHNOLOGY STACK



Fintra Mobile App: React Native developed using ***Natively AI co-pilot*** - deployed to expo.app, expo GO



FintraSync Analysis Engine: **Grok, Llama** powered multi-agent, MCP, python based analysis engine -
deployed to Render

- 
- Fraud Detection, Insider Trading: Attempted Agents using **Coral Framework**.
 - Voice integration: Attempted on the mobile app using **Grok, Llama**

MOBILE UI

Profile

Age

41

Gender

Male

Home Owner

No

Risk Tolerance

Aggressive

Investments (Stocks)

Upload Portfolio

View Portfolio

Current Portfolio

Total Value: \$20,695

5 stocks

Save Profile

Dashboard

Profile

Indicators

Profile

Age

Gender

Portfolio Details

AAPL

Quantity: 15 shares

Price: \$195

Sector: Technology

\$2,925

TSLA

Quantity: 8 shares

Price: \$265

Sector: Automotive

\$2,120

VOO

Quantity: 20 shares

Price: \$405

\$8,100

Close

Dashboard

Profile

Indicators

Dashboard

Profile Overview

Total Portfolio Value: \$2,925

1 stocks in portfolio

AAPL

\$2,925

Portfolio Analysis

Refresh data on next request

Forecast

Forecast Analysis

PORTFOLIO ANALYSIS

• **AAPL:** 15 shares, \$195.00 purchase price, Technology sector

MARKET DATA

• AAPL: \$209.95 current price, market cap: \$3.14T, last updated: 2025-07-08

Advice

Dashboard

Profile

Indicators

Indicators

Economic and General Indicators

1. Modeling Human Behavior

Researchers have developed models to predict economic trends by analyzing patterns in human behavior, such as spending, saving, and investing. These models often use data from social media, transaction records, and surveys to understand and forecast market movements.

2. Sentiment Analysis

Sentiment analysis uses natural language processing to gauge public mood from news, social media, and financial reports. This helps investors and policymakers anticipate market shifts and economic changes.

3. Current News


• The US economy added 147,000 jobs in June 2025, with unemployment falling to 4.1%, signaling a healthier labor market. (Source: MarketPulse)

• Despite high interest rates and inflation, the US economy grew by over 3% in late 2024, but many Americans remain concerned about the cost of living. (Source: NPR)

Groq/Llama in Action

```
llm.py 1 x
hack > fintra > llm.py > ...
1 import os
2 import requests
3 from dotenv import load_dotenv
4
5 # Only load from .env if GROQ_API_KEY is not already set
6 if not os.getenv("GROQ_API_KEY"):
7     load_dotenv()
8
9 # Try to get API key from environment, then from file
10 GROQ_API_KEY = os.getenv("GROQ_API_KEY")
11 if not GROQ_API_KEY:
12     # Try to read from a shared file
13     try:
14         with open("/app/data/groq_api_key.txt", "r") as f:
15             GROQ_API_KEY = f.read().strip()
16     except FileNotFoundError:
17         pass
18
19 def call_groq_llama(prompt: str, model="llama3-70b-8192", system_message="You are a helpful financial advisor."):
20     url = "https://api.groq.com/openai/v1/chat/completions"
21     headers = {
22         "Authorization": f"Bearer {GROQ_API_KEY}",
23         "Content-Type": "application/json"
24     }
25
26     data = {
27         "model": model,
28         "messages": [
29             {"role": "system", "content": system_message},
30             {"role": "user", "content": prompt}
31         ],
32         "temperature": 0.7
33     }
34
35     response = requests.post(url, headers=headers, json=data)
36     response.raise_for_status()
37     return response.json()["choices"][0]["message"]["content"]
38
```


Natively AI in Action

 rename news.tsx as status.tsx

Tokens: 14172 (prompt: 12174, completion: 1998)


Thought process





I need to rename the news.tsx file to status.tsx. This involves: 1. Creating a new file status.tsx with the same content as news.tsx 2. Updating any references to this file in the navigation 3. Making sure the component name and functionality reflect the new name
I'll rename the news.tsx file to status.tsx and update any references to it.

Rename news.tsx to status.tsx
Click to open Workbench

I've renamed the file from news.tsx to status.tsx and made these

Response Generated

OpenRouter Anthropic: Claude 3.7 Sonnet - in:\$3.00 out:\$...
OpenRouter API Key:  Set via UI

What do you want to build today?
   

Git Project: fintrasync-mobile.git

Project Created
Click to open Workbench

Initial files created

Found "dev" script in package.json. Running "npm run dev" after installation.

Project Setup
Click to open Workbench

Run command
npm install

Files Search

app
(tabs)
_layout.tsx
ask.tsx
dashboard.tsx
news.tsx
styles
global.ts
_layout.tsx
+not-found.tsx
index.tsx
components
askApi.ts
profile.tsx

README.md
1 # Personal Financial Wizard
2
3 # EXPO https://expo.dev
4
5 ## Check out the repo
6 npm install | npm install --legacy-peer-deps
7 npx expo install --check [to install updated version] [\[to install updated version\]](#)
8 npx expo-doctor
9 npx expo start
10
11 # EAS
12 # Make sure eas-cli installed globally:
13 sudo npm install -g eas-cli
14 eas --version [eas-cli/16.10.0 linux-x64 node-v18.12.0]
15
16 # EAS commands
17 eas login
18 eas init
19 eas build:configure | eas update:configure
20 npx expo export --platform web [web bundle create] [\[web bundle create\]](#)
21 eas deploy --prod [fintra.expo.app] [\[fintra.expo.app\]](#)
22

```
1 | import React from 'react';  
2 | import { Ionicons } from '@expo/vector-icons';  
3 | import { View, Text, StyleSheet, TouchableOpacity, Image } from 'react-native';
```




Call Stack
<unknown> (app/(tabs)/dashboard.tsx:0)
Web Bundling failed 47746ms node_modules/expo-router/entry.js (812 modules)

Successfully pushed to GitHub

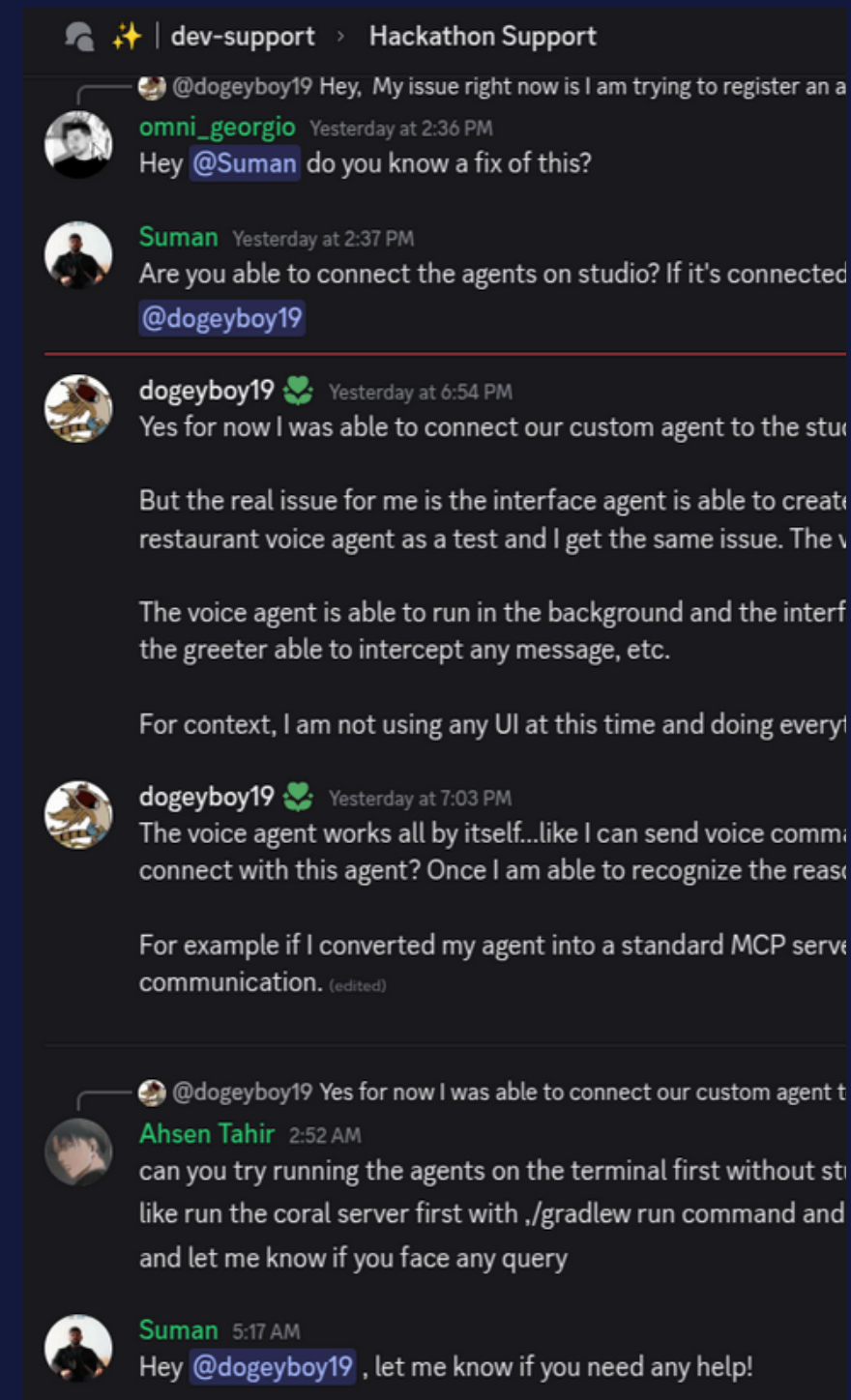
Repository URL
<https://github.com/brahmapsen/fintrasync-mobile>

Pushed Files (25)

app.json	1.1 KB
eas.json	344.0 B
README.md	905.0 B
package.json	1.5 KB
app/index.tsx	125.0 B
tsconfig.json	253.0 B
web/index.html	1.4 KB

 View Repository  Copy URL  Close


Communication with Coral Team



Features




A personalized, Agentic AI investment companion

- Use of Grok, Llama LLM and Agentic Framework for dynamic analysis
 - Live market data from finnhub.io
 - Use of Natively AI co-pilot for UI mobile app development
 - Attempted integration with Coral Agentic Framework
 - Attempted Voice interface to UI
- 

Future



A ROBUST Investment Advisor with

- Dynamic Agentic Framework and Platform
 - Validation framework for analysis results
 - Include fraud detection, insider trading, human emotion, sentiment analysis and additional economic indicators for better accuracy
- 

THANK YOU!

The End

