



LIVE

SENTIMENTPULSE

By Team Spirit

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Team Member Roles and Responsibilities



Sandhya Reddy Kallem

Frontend developer



***Dhruv Maheshbhai
Ranpariya***

Frontend Developer



Yashwanth Thalla

Backend Developer

Team Member Roles and Responsibilities



Hema Durga Prasad Chittala
Backend Developer



Sravan Kumar Ganji
Machine Learning Engineer

Improvements

- Adding challenges in personas
- Changes in the product backlog by adding story points
- Adding id for sprint backlog
- Keep the committed to completed around 80% to 90%
- Fixing the burndown chart

Project Description

Project Name:	SentimentPulse
Team:	Team Spirit
Project Description:	<p>For stock market traders and investors who need to stay informed about stock market news, the SentimentPulse application is a news aggregator and sentiment analysis tool that pulls in stock market news from various sources and analyzes each article's sentiment (positive, negative, or neutral) using AI. Unlike traditional news platforms or manual research, our application allows users to filter news based on sentiment, relevance, and stock symbols, helping them make faster and more informed trading decisions.</p>
Benefit Outcomes:	<p>Faster decision-making by filtering news based on sentiment, relevance, and stock symbols.</p> <p>Improved accuracy in evaluating stock market news with AI-driven sentiment analysis.</p> <p>Time savings by centralizing stock market news from various sources.</p>
Github Link:	https://github.com/htmw/2024F-Team-Spirit/wiki

Team Agreement

Team Agreement

1. Meetings:

- The team will meet regularly every Wednesday and Thursday at 7:00 PM. These meetings will serve as checkpoints to review progress, discuss challenges, and plan upcoming tasks.
- The attendance of all team members will be expected to ensure that there is alignment and effective communication regarding the status of the projects.

2. Communication:

- Slack will be the main communication tool for updates, quick questions, or discussions day in and day out. All team members are expected to be active on Slack, ensuring that responses are issued in a timely manner.
- GitHub will be used for versioning, collaboration, and reviewing code. All pull requests should be reviewed and signed off by at least one other member of the team before being merged into the main branch.

3. Commitment and Deadlines:

- Each member is responsible for completion of tasks assigned to him/her within the time agreed on for its delivery. This helps the team stay right on schedule in the delivery of some of the milestones of the project.
- Issues that may be expected unexpectedly should be communicated to team members proactively in advance, and problems solved with necessary help so as not to delay the progress.

4. Work Submission:

- It is expected that in the project code, documentation, and other deliverables, all tasks should be up for review by the team at least 24 hours in advance of the actual deadline. This would have been enough time to do the reviewing and probably some revising.

5. Accountability:

- If any member of the team perceives that he will not be able to deliver a task, he should inform the team no less than 48 hours in advance. This will give the team sufficient room to perform any reassignment of tasks, seek out available help, or adjust priorities as appropriate.
- It is accountability that keeps up the trust and efficiency within the team.

6. Collaboration:

- Where any of the team members happen to finish earlier than planned, he or she is supposed to help others in case some of the colleagues have more difficult work or for any reason appear to fall behind. In this way, collaboration and mutual support will be assured to provide success to the whole project.
- Feedback is allowed, and knowledge is shared in the project continuously, helping each member to improve and grow.

7. Conflict Resolution:

- Any disputes and issues arising within the team should be discussed openly and resolved on a professional note.
- The team will first try to resolve conflicts in-house by openly discussing issues. If it cannot be resolved in-house, then the team can seek outside mediation or the Professor.
- Conflicts should be treated with respect, and every opinion of the team members matters.

8. Decision-Making Process:

- All decisions-technological the project will be made jointly.
- Decisions on major issues shall be discussed among the members in such a way that due consideration is given to all members having an opportunity to be heard. When no consensus is reached, it may be put to a majority vote.
- This would be left to the discretion of the team lead or designated representative in the event of a tie.

9. Roles and Responsibilities:

- Each team member will be assigned particular roles to perform, which are allocated in accordance with his or her skill and interest in general. Clearly defined roles ensure common understanding of the responsibility that everyone has in effectively contributing.
- While individual tasks will be assigned, the team will be flexible so each member can help another whenever the need arises.

Team Members:

- Sandhya Reddy Kalleem
- Dhruv Maheshbhai Ranpariya
- Yashwanth Thalla
- Hema Durga Prasad Chitala
- Sravan Kumar Ganji

Rajesh Verma (India)



- **Age:** 35
- **Occupation:** Software Engineer
- **Experience with Investing:** 5 years
- **Location:** Bengaluru, India
- **Investment Strategy:** Focuses on Indian stocks with occasional investments in U.S. tech stocks. Primarily uses fundamental analysis and financial news.
- **Challenges:** Rajesh's demanding job leaves him with limited time to monitor markets, especially given his tech-heavy portfolio. He's overwhelmed by the volume of news and struggles to quickly filter relevant insights, often missing timely opportunities.
- **Goal:** To make faster, data-driven stock decisions using an AI tool that highlights relevant updates and fits his busy schedule.

Elsa Thompson (United States)



Age: 28

Occupation: Financial Analyst

Experience with Investing: 7 years

Location: New York, USA

- **Investment Strategy:** Tracks energy and healthcare sectors, relying on research and sentiment data.
- **Challenges:** Sorting through large volumes of news delays Elsa, leading to occasional missed insights. She finds it difficult to quickly identify sector-specific news that could impact her recommendations.
- **Goal:** To improve her efficiency by using AI to prioritize critical news in her sectors, enabling more timely, insightful recommendations.

Lucas Müller (Germany, Europe)



- **Age:** 45

- **Occupation:** Independent Investor & Trader

- **Experience with Investing:** 15 years

- **Location:** Munich, Germany

- **Investment Strategy:** Trades European and U.S. stocks, relying on global news.

- **Challenges:** The global scope of his portfolio requires Lucas to keep up with a vast range of international events. He wants to reduce emotional trading and leverage AI-driven sentiment analysis to make quicker, objective decisions.

- **Goal:** To use AI to filter impactful global news and provide sentiment insights, helping him trade more confidently and objectively.

Minimum Viable Product

- **News Aggregation**

Fetch and display financial news articles from reputable sources through APIs.

- **Sentiment Analysis**

Analyze the sentiment of each news article (positive, neutral, negative) using a sentiment analysis tool.

- **Company Mention Detection**

Identify and highlight companies referenced in the news articles.

- **User Interface**

Present the news articles, sentiment scores, and impacted companies in a clean, intuitive interface.

Technologies



Backend

Flask, Express JS

Frontend

ReactJS

Database

MongoDB

Machine Learning

PyTorch, Huggingface

API

NewsAPI

Cloud Hosting

GCP

Backend

What is it?

Flask is a lightweight Python web framework, and Express JS is a fast and minimalist web framework for Node.js.



How is it used?

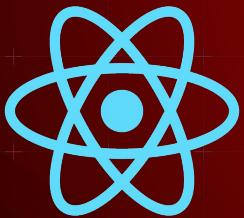
Flask or Express JS will be used to handle backend logic, manage API requests, and serve data between the frontend and the database, enabling communication between the sentiment analysis AI and the stock market news aggregator.

A large, bold, black, sans-serif font where the letters 'e' and 'x' are joined together, forming a single continuous shape. The letter 'e' is on the left, curving upwards and to the right, and the letter 'x' is on the right, extending downwards from the top of the 'e'. The entire character is rendered in a thick, solid black.

Frontend

What is it?

ReactJS is a popular JavaScript library for building interactive user interfaces.



How is it used?

ReactJS will be used to build the web application's dynamic and responsive frontend, allowing users to interact with the platform, view stock market news, and access AI-driven sentiment insights.

DATABASE

What is it?

MongoDB is a NoSQL database designed for flexibility and scalability, storing data in JSON-like documents.



How is it used?

MongoDB will store news articles, user preferences, and AI-generated sentiment analysis, enabling fast retrieval and updates as new data comes in from the API.

Machine learning

What is it?

PyTorch is a machine learning framework, and Huggingface is a platform that provides pre-trained models and tools for NLP tasks.



How is it used?

PyTorch and Huggingface will be used to develop and deploy sentiment analysis models that process stock market news and classify the sentiment of each article (positive, neutral, or negative).

API

What is it?

NewsAPI is a service that provides access to news articles from various sources around the world.

How is it used?

NewsAPI will be integrated into the backend to pull relevant stock market news articles, which will be processed by the sentiment analysis model before being displayed to users.

Cloud Hosting

What is it?

Google Cloud Platform is a suite of cloud computing services that provides infrastructure for hosting applications.



How is it used?

GCP will host the web application, manage the backend servers, store data, and provide the resources necessary for running the machine learning models and API integrations efficiently.

Algorithm

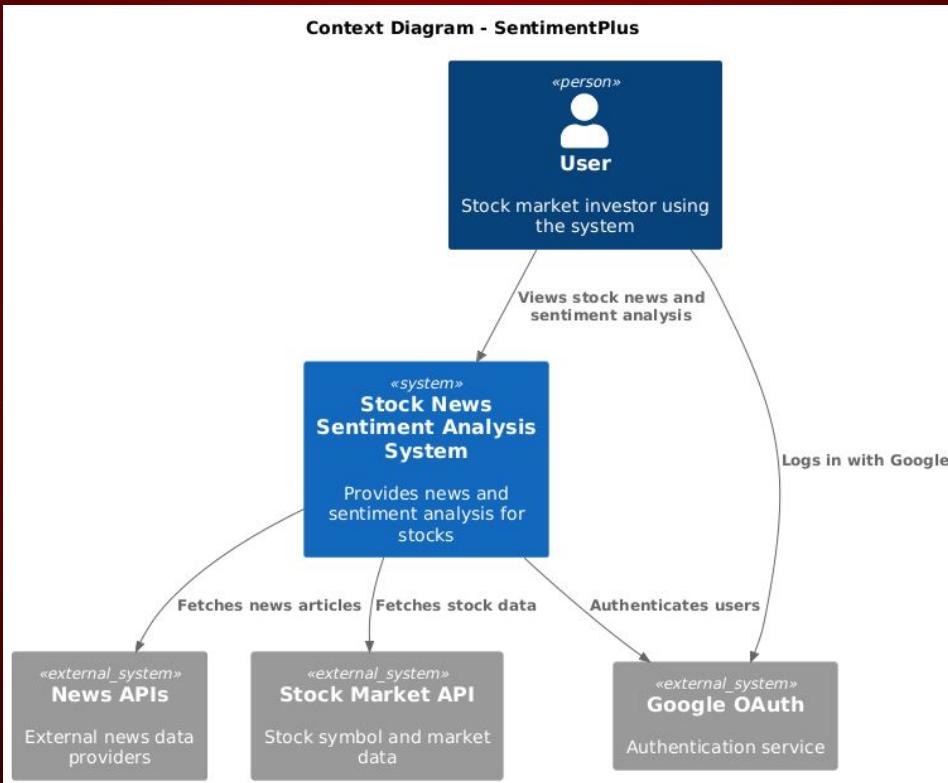
What is BERT?

BERT is an advanced Natural Language Processing (NLP) model developed by Google. It is formulated on the Transformer architecture and is devised to comprehend the context of a word in a sentence by studying it in both directions—left and right from the word—thus, it is very useful for sentiment analysis tasks, for example, understanding the sentiment of the text.

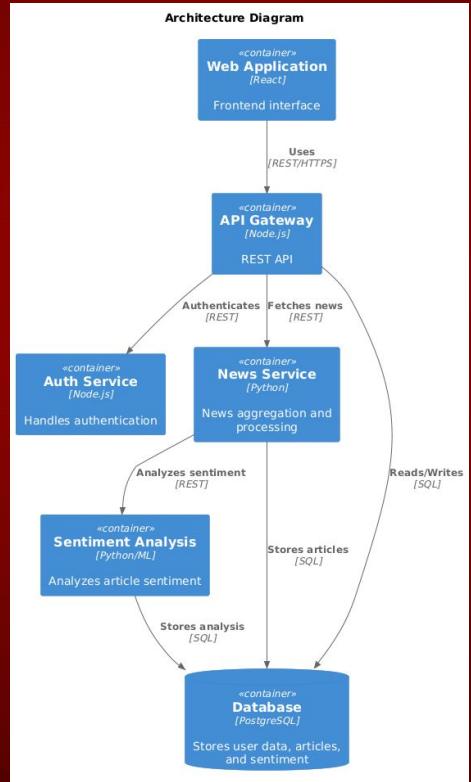
In what way is it applied?

In the context of your project, BERT can be utilized through Huggingface to analyze stock market news articles and perform sentiment analysis. It will monitor the text and determine the sentiment(s) expressed in the news as positive, neutral, or negative. Therefore the technology enabling the categorization of each news piece and, consequently the provision of sentiment insights to the investors that quick assess of how the news may impact the stock performance. BERT's success in learning complex language patterns makes sentiment analysis more precise, which gives a more well-founded recommendation compared to the traditional NLP models.

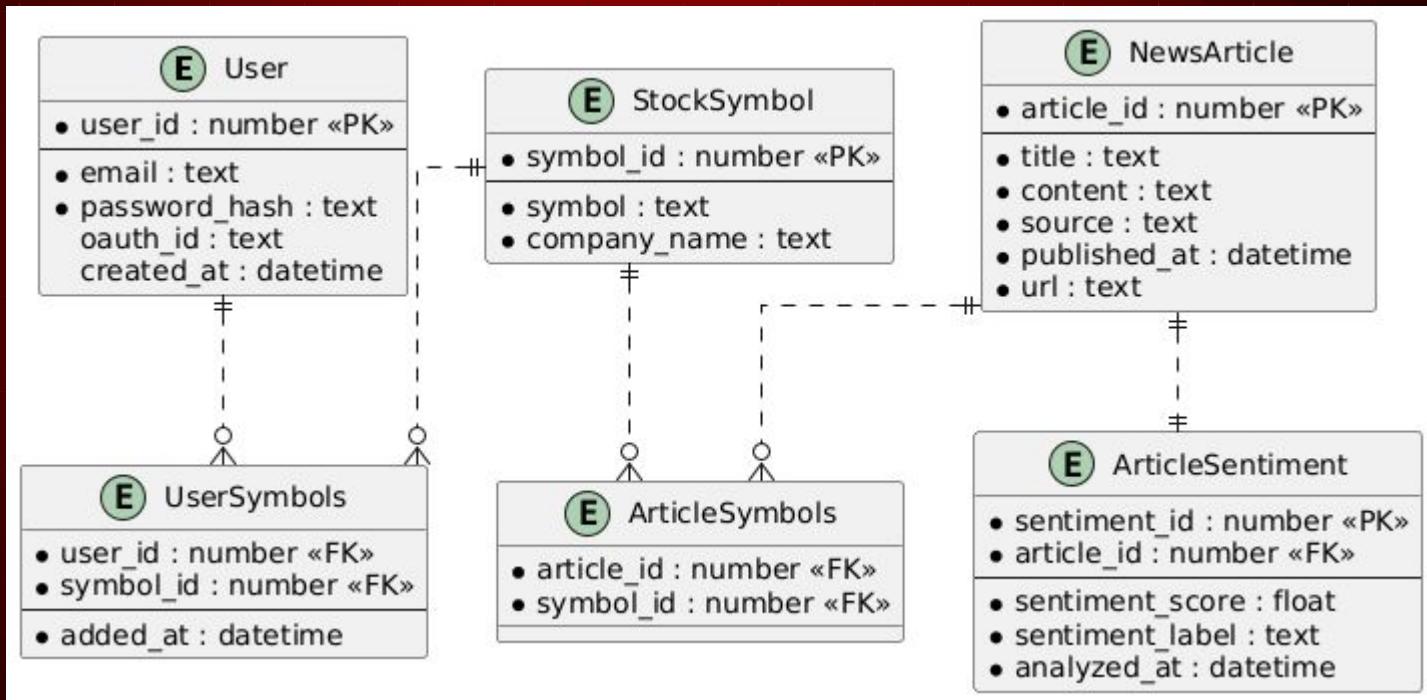
Context Diagram



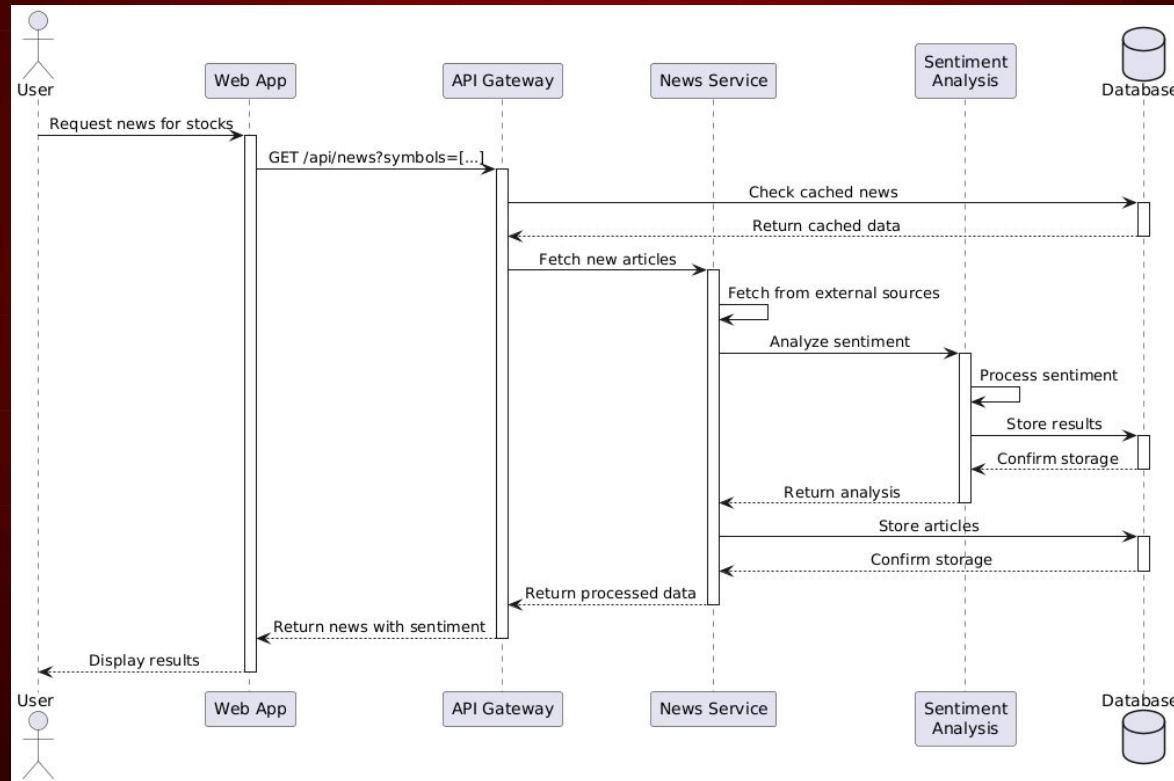
Architecture Diagram



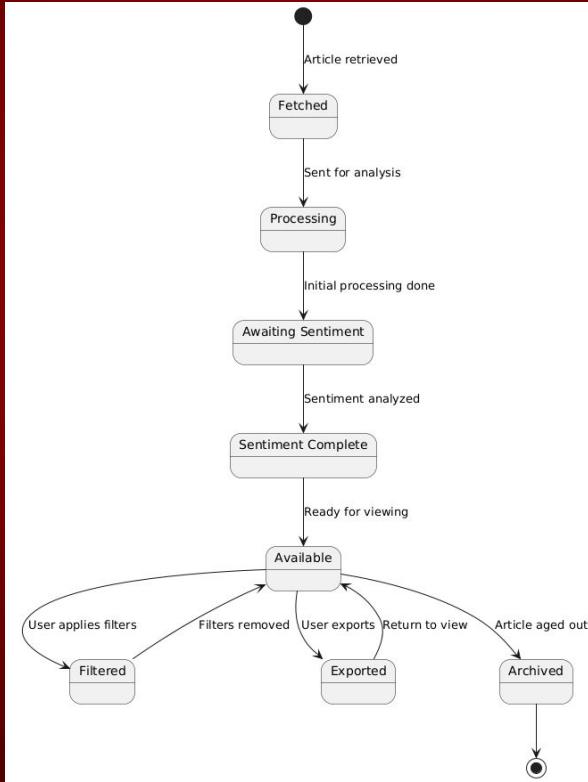
ER Diagram



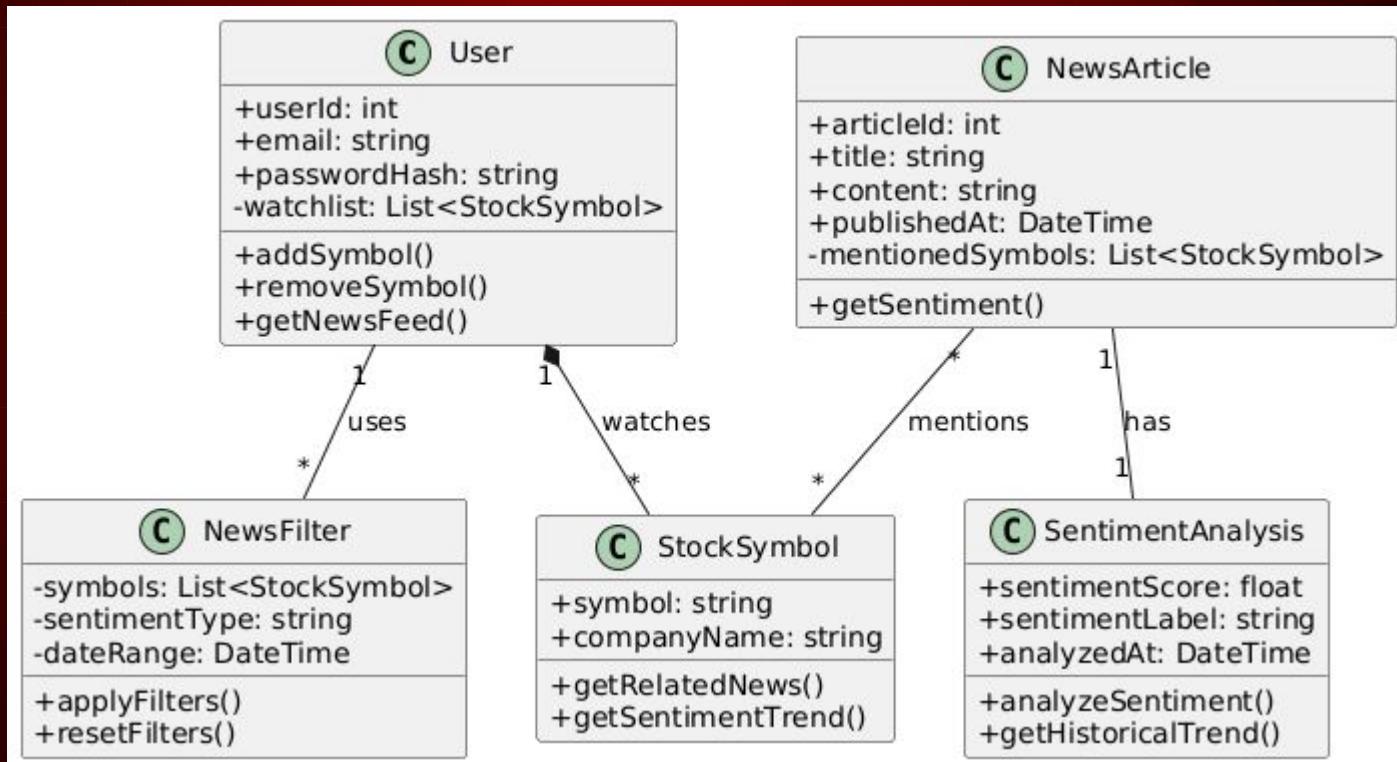
Sequence Diagram



State Diagram



Class Diagram



Sprint 1 Recap

- **Completed Key Functionalities:** All stories and technical tasks in Sprint 1 were completed, including stock symbol input, news filtering by stock symbols, chronological display of articles, relevance-based filtering, and backend setup for news aggregation.
- **Achieved 100% Completion Ratio:** The sprint achieved a 100% completion rate, with all committed 31 story points completed.
- **Effective Database Setup and Backend Functionality:** The backend was successfully configured to fetch news from multiple sources, and a robust database structure was implemented to support user profiles, stock symbols, and news article data.

Product Backlog

ID	Description	Acceptance Criteria	Feature	Story Points
US1.1	As an investor, I want to input stock symbols of interest to receive relevant news articles.	Users can search and input stock symbols. Stock symbols stored and shown on dashboard.	Stock Symbols	5
US1.2	As an investor, I want to view a list of news articles related to the stock symbols I've selected.	Articles are filtered by stock symbols. News displayed in chronological order.	News Feed	8
US1.3	As an investor, I want to filter news articles by relevance to my stock symbols to focus on the most important articles.	News ranked by relevance to stock symbols. Filter option for relevant articles only.	News Relevance Filter	5
TT1.4	Backend developer sets up infrastructure for news aggregation and stock symbol search.	API fetches news from 3 sources. Backend handles stock searches and storage.	Backend Infrastructure	8
TT1.5	Database administrator establishes database structure for user profiles, stock symbols, and news articles.	Create tables for users, symbols, articles. Ensure user-stock preferences are linked.	Database Setup	5

Product Backlog

ID	Description	Acceptance Criteria	Feature	Story Points
US2.1	As an investor, I want to log in securely to access personalized sentiment analysis.	Users log in with email/password. Support Google OAuth login.	Authentication	8
US2.2	As an investor, I want each news article to display a sentiment rating (positive) to gauge its emotional tone.	Sentiment rating visible for each article. Sentiment rating is easy to understand.	Sentiment Analysis	5
US2.3	As an investor, I want each news article to display a sentiment rating (negative) to gauge its emotional tone.	Sentiment rating visible for each article. Sentiment rating is easy to understand.	Sentiment Analysis	5
US2.4	As an investor, I want each news article to display a sentiment rating (neutral) to gauge its emotional tone.	Sentiment rating visible for each article. Sentiment rating is easy to understand.	Sentiment Analysis	5
US2.5	As an investor, I want to filter news articles by sentiment type to focus on specific tones (e.g., positive news).	Filter by positive, negative, neutral. Dynamic UI update when filtering.	Sentiment Filter	5

Product Backlog

ID	Description	Acceptance Criteria	Feature	Story Points
TT2.6	Developer integrates AI sentiment analysis engine for news articles.	AI assigns sentiment to articles. AI achieves 80% accuracy or higher.	Sentiment Analysis Engine	8
TT2.7	Developer implements user authentication system (login and OAuth).	Implement login with email/password. Add OAuth for social logins.	Authentication	13
TT2.8	Developer connects backend to sentiment analysis model.	API connects backend to sentiment model. Ensure real-time sentiment processing.	Backend Integration	3
US3.1	As an investor, I want to filter articles based on both stock symbols and sentiment to focus on the best insights for my trading decisions.	Apply filters for symbols and sentiment. Filtered news updates in real time.	Combined Filtering	5
US3.2	As an investor, I want to export sentiment analysis and news data to a CSV file to analyze it offline.	Provide option to export data to CSV. Export includes stock, sentiment, and news.	Data Export	3

Product Backlog

ID	Description	Acceptance Criteria	Feature	Story Points
US3.3	As an investor, I want to view historical sentiment trends for a particular stock symbol to analyze long-term market sentiment.	Sentiment trends shown graphically. View trends for different time periods.	Historical Trends	8
US3.4	As an investor, I want to reset all filters easily to return to the full, unfiltered news feed.	Provide a clear option to reset filters. Reset clears all active filters.	Filter Reset	2
TT3.5	Developer implements historical sentiment tracking and visualization.	Track and store historical sentiment. Display trends using a graph.	Historical Sentiment Graph	8
TT3.6	Developer improves frontend performance and responsiveness.	Optimize UI for mobile and desktop. Ensure fast filter application.	Frontend Optimization	5

Sprint 2 Backlog

ID	Description	Acceptance Criteria	Feature	Story Points
US2.1	As an investor, I want to log in securely to access personalized sentiment analysis.	Users log in with email/password. Support Google OAuth login.	Authentication	8
US2.2	As an investor, I want each news article to display a sentiment rating (positive) to gauge its emotional tone.	Sentiment rating visible for each article. Sentiment rating is easy to understand.	Sentiment Analysis	5
US2.3	As an investor, I want each news article to display a sentiment rating (negative) to gauge its emotional tone.	Sentiment rating visible for each article. Sentiment rating is easy to understand.	Sentiment Analysis	5
US2.4	As an investor, I want each news article to display a sentiment rating (neutral) to gauge its emotional tone.	Sentiment rating visible for each article. Sentiment rating is easy to understand.	Sentiment Analysis	5
US2.5	As an investor, I want to filter news articles by sentiment type to focus on specific tones (e.g., positive news).	Filter by positive, negative, neutral. Dynamic UI update when filtering.	Sentiment Filter	5

Sprint 2 Backlog

ID	Description	Acceptance Criteria	Feature	Story Points
TT2.6	Developer integrates AI sentiment analysis engine for news articles.	AI assigns sentiment to articles. AI achieves 80% accuracy or higher.	Sentiment Analysis Engine	8
TT2.7	Developer implements user authentication system (login and OAuth).	Implement login with email/password. Add OAuth for social logins.	Authentication	13
TT2.8	Developer connects backend to sentiment analysis model.	API connects backend to sentiment model. Ensure real-time sentiment processing.	Backend Integration	3

Test Cases

Test Case ID	ID	Test Case Description	Expected Result	Actual Result	Pass/Fail
TC1	US2.1	Test secure login with valid email/password credentials	User successfully logs in and is redirected to the dashboard.	User logged in but was not redirected to the dashboard.	Pass
TC2	US2.1	Test secure login with invalid email/password credentials	User receives an error message indicating invalid credentials.	User received correct error message.	Pass
TC3	US2.1	Test secure login using Google OAuth	User successfully logs in with Google and is redirected to the dashboard.	User logged in and redirected successfully.	Fail
TC4	US2.2	Test sentiment rating display for positive news article	Positive sentiment rating is displayed clearly and accurately for the article.	Sentiment rating displayed correctly.	Pass
TC5	US2.3	Test sentiment rating display for negative news article	Negative sentiment rating is displayed clearly and accurately for the article.	Sentiment rating not visible on the article page.	Pass

Test Cases

Test Case ID	ID	Test Case Description	Expected Result	Actual Result	Pass/Fail
TC6	US2.4	Test sentiment rating display for neutral news article	Neutral sentiment rating is displayed clearly and accurately for the article.	Sentiment rating displayed correctly.	Pass
TC7	US2.5	Test filter for positive sentiment news articles	Only positive sentiment news articles are displayed after filtering.	Displayed positive sentiment articles as expected.	Pass
TC8	US2.5	Test filter for negative sentiment news articles	Only negative sentiment news articles are displayed after filtering.	Displayed articles with mixed sentiment, including positive and neutral.	Pass
TC9	US2.5	Test filter for neutral sentiment news articles	Only neutral sentiment news articles are displayed after filtering.	Displayed only neutral sentiment articles.	Pass
TC10	TT2.6	Test AI sentiment analysis engine for accuracy in classifying news articles	AI correctly classifies articles with at least 80% accuracy.	AI classification accuracy was 76%.	Fail

Test Cases

Test Case ID	ID	Test Case Description	Expected Result	Actual Result	Pass/Fail
TC11	TT2.6	Test AI sentiment analysis on different types of news articles (positive, negative, neutral)	AI assigns correct sentiment rating to each article type (positive, negative, neutral).	AI sentiment classifications matched expected results.	Pass
TC12	TT2.7	Test login system with valid email/password and OAuth for user authentication	Users can log in using either email/password or OAuth without issues.	User successfully logged in with both methods.	Pass
TC13	TT2.7	Test login system with incorrect credentials or expired OAuth	User receives a proper error message indicating login failure.	User received incorrect error message for expired OAuth.	Fail
TC14	TT2.8	Test backend integration with sentiment analysis model for real-time processing	API successfully connects to the sentiment model and processes sentiment in real time.	API connected and processed sentiment data in real time.	Pass
TC15	TT2.8	Test latency for sentiment analysis API call from backend	Sentiment analysis completes within acceptable time limits (real-time processing).	Latency was above acceptable limits, causing a delay in sentiment analysis.	Fail

Stories Completed

ID	Feature	Description	Test Case IDs
US2.1	Authentication	Log in securely to access personalized sentiment analysis.	TC2, TC3
US2.2	Sentiment Analysis	Display sentiment rating (positive) for news articles.	TC4
US2.4	Sentiment Analysis	Display sentiment rating (neutral) for news articles.	TC6
US2.5	Sentiment Filter	Filter news articles by specific sentiment types (e.g., positive, negative, neutral).	TC7, TC9
TT2.6	Sentiment Analysis Engine	Test AI sentiment analysis on different types of news articles (positive, negative, neutral).	TC11
TT2.7	Authentication	Implement user authentication with both email/password and OAuth.	TC12
TT2.8	Backend Integration	Integrate backend with sentiment analysis model for real-time processing.	TC14

Stories Not Completed

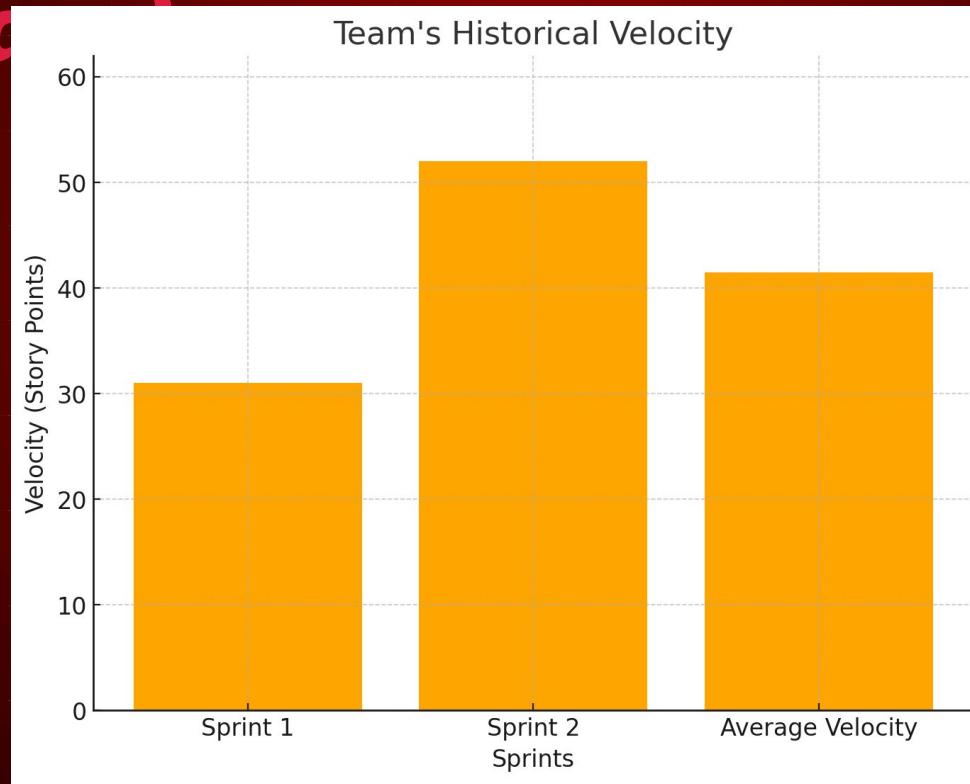
ID	Feature	Description	Test Case IDs
US2.1	Authentication	Log in securely to access personalized sentiment analysis.	TC1
US2.3	Sentiment Analysis	Display sentiment rating (negative) for news articles.	TC5
TT2.6	Sentiment Analysis Engine	Ensure AI sentiment analysis engine achieves 80% accuracy in classifying news articles.	TC10
TT2.7	Authentication	Display correct error message for expired OAuth credentials during login.	TC13
TT2.8	Backend Integration	Ensure latency for sentiment analysis API call from backend remains within acceptable limits.	TC15

Team Velocity - This Sprint

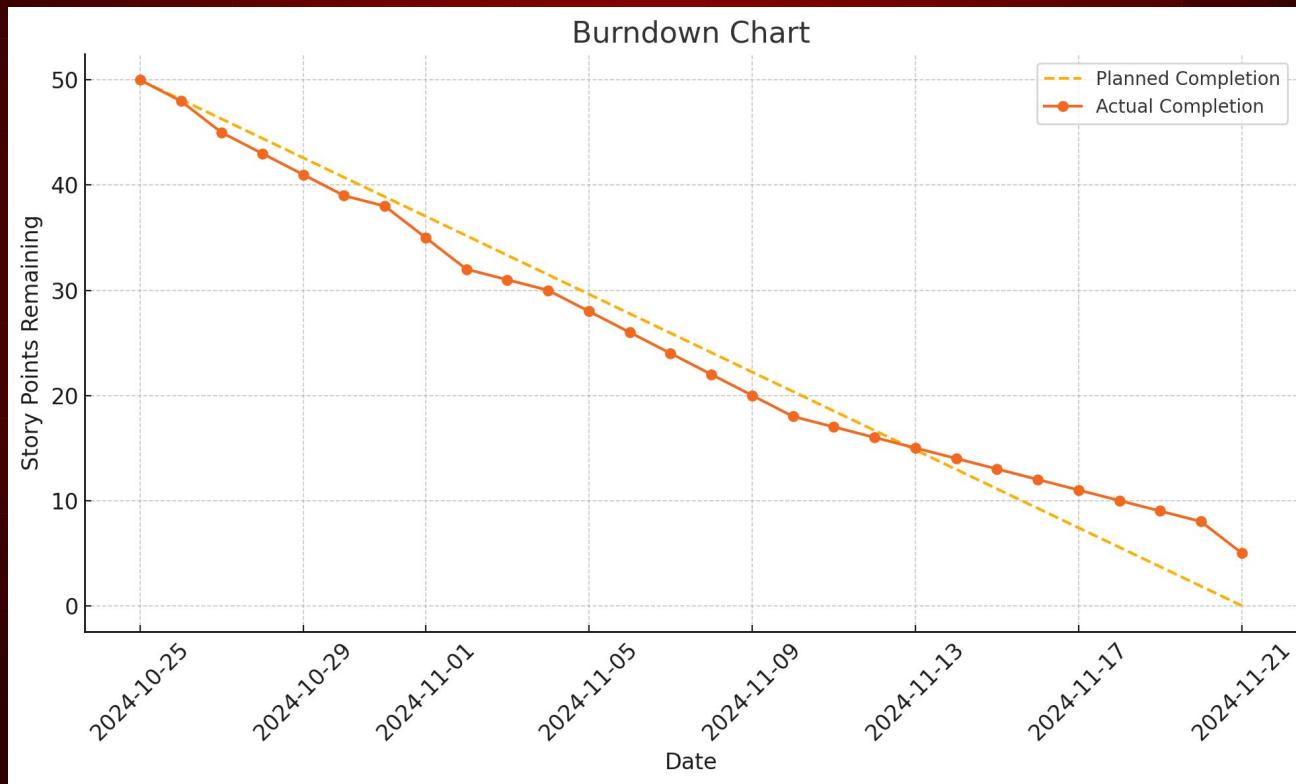
***Total Story Points Completed:
52 points***

Team's historical velocity

(average)



Burndown Chart



Completed/Committed Ratio

- **Completed Story Points:** 47
- **Committed Story Points:** 52

So, the ratio is:

- $47/52=0.90$ or 90.4%

Retrospective

IdeaBoardz

start typing to filter stickies

Export | Login

View Section | All Sections | Sort By | created time

sprint 2

What went well		What can be improved		Action Items	
sentiment filter UI was intuitive	Historical sentiment tracking and visualization worked as planned	data integration for sentiment tracking had delays	testing time for complex features was insufficient	improve backend planning for data-heavy features	implement early performance testing
+ 5	+ 3	+ 3	+ 3	+ 0	+ 0
frontend and backend collaboration was effective	trend graph was responsive on all devices	csv export format changes caused delays	Better communication on last-minute changes.	allocate more time for feature testing	finalize csv formats early in the sprint
+ 3	+ 1	+ 4	+ 4	+ 0	+ 0
performance optimization reduced load times	backend integration for sentiment and combined filtering was smooth	Some tasks were under-allocated, causing pressure.	Proactive monitoring of performance issues needed.	Improve communication on last-minute changes between team	Implement proactive monitoring for performance issues during development.
+ 1	+ 3	+ 5	+ 5	+ 0	+ 0
		Better handling of edge cases in filtering and visualization.	implement early performance testing	Some tasks were under-allocated, causing pressure.	
		+ 3	+ 5	+ 0	

Sprint 3 Backlog

ID	Description	Acceptance Criteria	Feature	Story Points
US3.1	As an investor, I want to filter articles based on both stock symbols and sentiment to focus on the best insights for my trading decisions.	Apply filters for symbols and sentiment. Filtered news updates in real time.	Combined Filtering	5
US3.2	As an investor, I want to export sentiment analysis and news data to a CSV file to analyze it offline.	Provide option to export data to CSV. Export includes stock, sentiment, and news.	Data Export	3
US3.3	As an investor, I want to view historical sentiment trends for a particular stock symbol to analyze long-term market sentiment.	Sentiment trends shown graphically. View trends for different time periods.	Historical Trends	8
US3.4	As an investor, I want to reset all filters easily to return to the full, unfiltered news feed.	Provide a clear option to reset filters. Reset clears all active filters.	Filter Reset	2
TT3.5	Developer implements historical sentiment tracking and visualization.	Track and store historical sentiment. Display trends using a graph.	Historical Sentiment Graph	8

Sprint 3 Backlog

ID	Description	Acceptance Criteria	Feature	Story Points
TT3.6	Developer improves frontend performance and responsiveness.	Optimize UI for mobile and desktop. Ensure fast filter application.	Frontend Optimization	5

App Screenshot

MARKET NEWS | 13:25:13 Updated: 13:25:08 test@example.com

[REFRESH](#) [LOGOUT](#)

Add symbol... [+](#)

[ALL NEWS](#) [3 ITEMS](#)

[rbi.org.in](#) 18/11/2024 NEUTRAL

Reserve Bank of India

In terms of (SGB 2017-18 Series VIII - Issue date November 20, 2017) on Sovereign Gold Bond Scheme, premature redemption of Gold Bond may be permitted after fif...

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Propeller Drones will use its partner Bladeranger's technology to clean Electra's solar energy fields.

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App Screenshot

MARKET NEWS

14:58:17

REFRESH

Add symbol...



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Based on a report from The Information, Apple Inc. (AAPL) has drastically reduced Vision Pro mixed reality headset production since the summer, will likely stop

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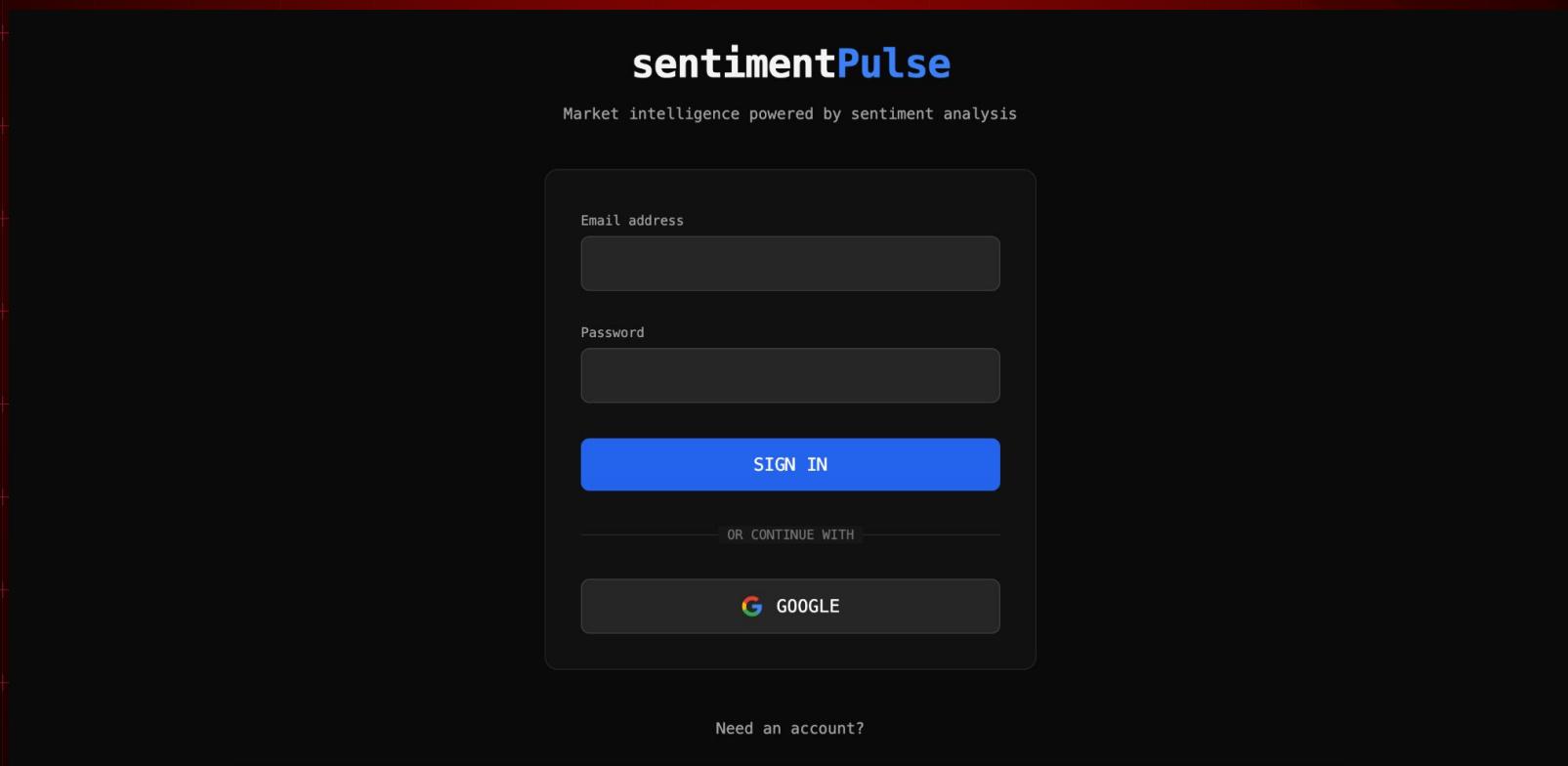
investing.com 23/10/2024 \$AAPL

Apple down as top analyst Kuo says company cut iPhone 16 orders by 10M units By Investing.com

Apple down as top analyst Kuo says company cut iPhone 16 orders by 10M units

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App Screenshot



API

The screenshot shows the Postman application interface. The top navigation bar includes Home, Workspaces, API Network, Overview, and a search bar. The main workspace is titled "Team Workspace" and contains a collection named "API documentation". A current request is displayed for "http://localhost:3000/api/news" with a GET method. The "Params" tab is selected, showing a single query parameter "Key": "Value". The "Body" tab is active, displaying a JSON response with three news items. The first item has an ID of "e9c30555-f9ce-4a2b-afcd-8e3233dcbbfe", title "Who Should Voters Trust on the Economy?", and a link to "https://mises.org/podcasts/individual-interview/who-should-voters-trust-economy". The second item has an ID of "77623b29-ale1-4d2e-bac6-c00807c511db", title "European Short-term Bonds Rise as Traders Bet on ECB Rate Cut", and a link to "https://www.gurufocus.com/news/2563799/european-shortterm-bonds-rise-as-traders-bet-on-eccb-rate-cut". The third item has an ID of "d0033d72-cb8d-4b01-9cf8-b0583f511c6e", title "CSGP Shares Decline After Disappointing Earnings Report", and a link to "https://www.gurufocus.com/news/2563799/european-shortterm-bonds-rise-as-traders-bet-on-eccb-rate-cut". The status bar at the bottom indicates a 200 OK response with a time of 13 ms and a size of 1.72 KB.

```
[{"id": "e9c30555-f9ce-4a2b-afcd-8e3233dcbbfe", "title": "Who Should Voters Trust on the Economy?", "description": "On October 18, 2024, Jonathan Newman appeared on The Lakey Effect with Jimmy Lakey to discuss whether or not voters should trust Trump on the economy. Or,", "source": "mises.org", "url": "https://mises.org/podcasts/individual-interview/who-should-voters-trust-economy", "publishedAt": "2024-10-23T18:38:00.000000Z", "relatedSymbols": []}, {"id": "77623b29-ale1-4d2e-bac6-c00807c511db", "title": "European Short-term Bonds Rise as Traders Bet on ECB Rate Cut", "description": "European short-term bonds have climbed, contrasting with the movements of similar U.S. and UK securities, as traders anticipate a 50 basis point rate cut by the", "source": "gurufocus.com", "url": "https://www.gurufocus.com/news/2563799/european-shortterm-bonds-rise-as-traders-bet-on-eccb-rate-cut", "publishedAt": "2024-10-23T18:30:13.000000Z", "relatedSymbols": []}, {"id": "d0033d72-cb8d-4b01-9cf8-b0583f511c6e", "title": "CSGP Shares Decline After Disappointing Earnings Report", "description": "CoStar Group (CSGP) shares fell by 9.06% after the company released its third-quarter earnings report, which did not meet market expectations. The stock is curi", "source": "gurufocus.com"}]
```

API

The screenshot shows the Postman application interface. The left sidebar displays "Team Workspace" with sections for Collections, Environments, and History. The main workspace shows an "Overview" of a collection named "http://localhost:3000/api/news?symbols=AAPL,TSLA,AMZN". A "GET" request is selected with the URL "http://localhost:3000/api/news?symbols=AAPL,TSLA,AMZN". The "Params" tab shows a parameter "symbols" with values "AAPL,TSLA,AMZN". The "Body" tab shows the response body in JSON format:

```
1 [  
2 {  
3     "id": "66440da2-f217-41b8-9785-d0dbfe2b9983",  
4     "title": "Goldman Sachs, Apple fined by CFPB",  
5     "description": "Firms' joint foray into consumer finance wasn't ready, regulator alleges",  
6     "source": "advisor.ca",  
7     "url": "https://www.advisor.ca/industry-news/regulation/goldman-sachs-apple-fined-by-cfpb/",  
8     "publishedAt": "2024-10-23T18:02:09.000000Z",  
9     "relatedSymbols": [  
10         "AAPL"  
11     ]  
12 },  
13 {  
14     "id": "dbd43f12b-3939-4613-98f1-6293779502ab",  
15     "title": "Apple Scales Back Vision Pro Production, Plans Cheaper Version for 2024 as Demand Lags",  
16     "description": "Based on a report from The Information, Apple Inc. (AAPL) has drastically reduced Vision Pro mixed reality headset production since the summer, will likely stop",  
17     "source": "gurufocus.com",  
18     "url": "https://www.gurufocus.com/news/2563702/  
19         apple-scales-back-vision-pro-production-plans-cheaper-version-for-2024-as-demand-lags",  
20     "publishedAt": "2024-10-23T17:35:29.000000Z",  
21     "relatedSymbols": [  
22         "AAPL"  
23     ]  
24 },  
25 {  
26     "id": "844ad893-8b05-45ac-bcfc-ed5ff5cd1a34",  
27 }
```

The status bar at the bottom indicates "Status: 200 OK Time: 6.36 s Size: 1.7 KB".

WikiPage

<https://github.com/htmw/2024F-Team-Spirit/wiki>



LIVE

Application Demo



Thank you