TENSION FLOW NEWS

Presents

Untangle the News: Follow the threads that matter

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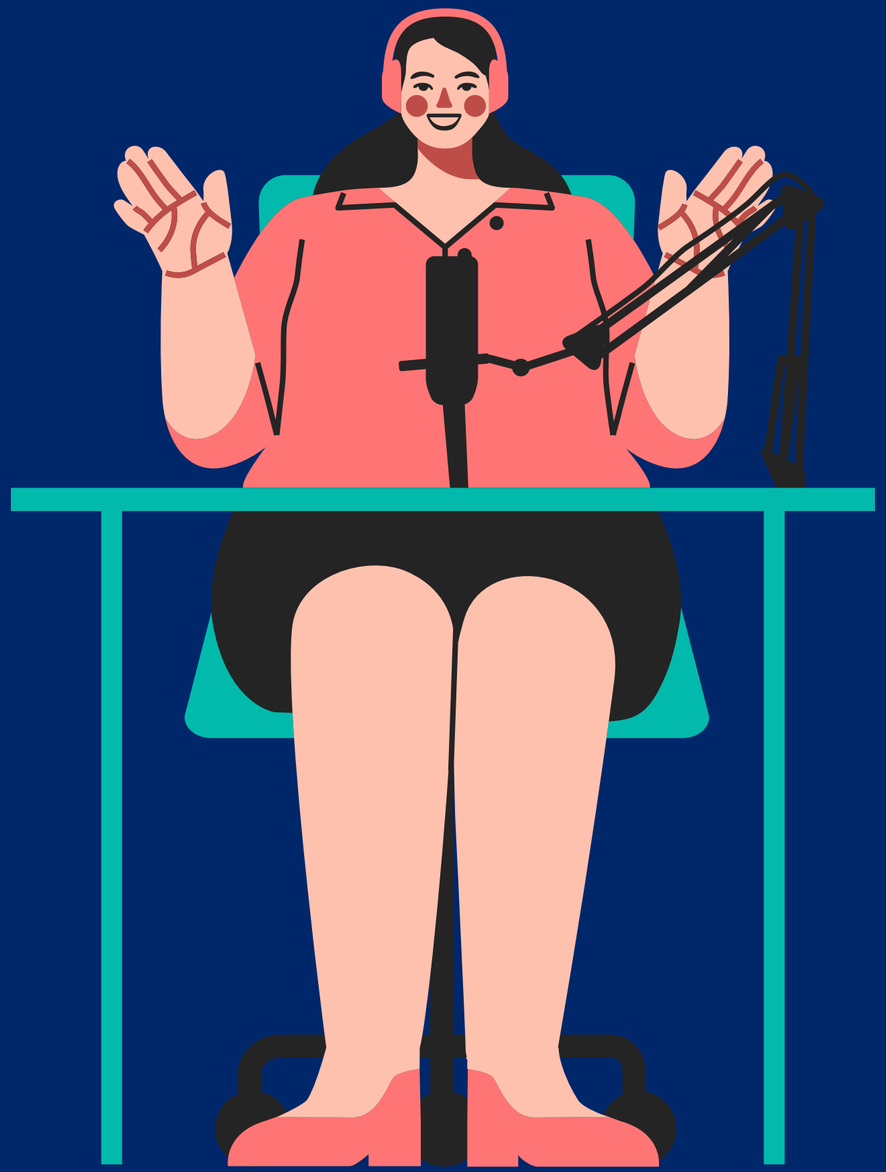
PROBLEM STATEMENT

The problem is the challenge of tracking and understanding significant events amidst information overload. The solution involves creating a system that continuously extracts real-time news data from public sources and Airrchip APIs. This system employs NLP techniques, large language models, and network analysis to categorize events, construct an interactive network graph, and evaluate connections. The goal is to design a user-friendly interface allowing exploration and interaction with the graph while ensuring scalability and performance with large volumes of dynamic data.



TECHSTACKS USED

supabase

NEXT.JS

NetworkX
Network Analysis in Python

VectorDB

Flask

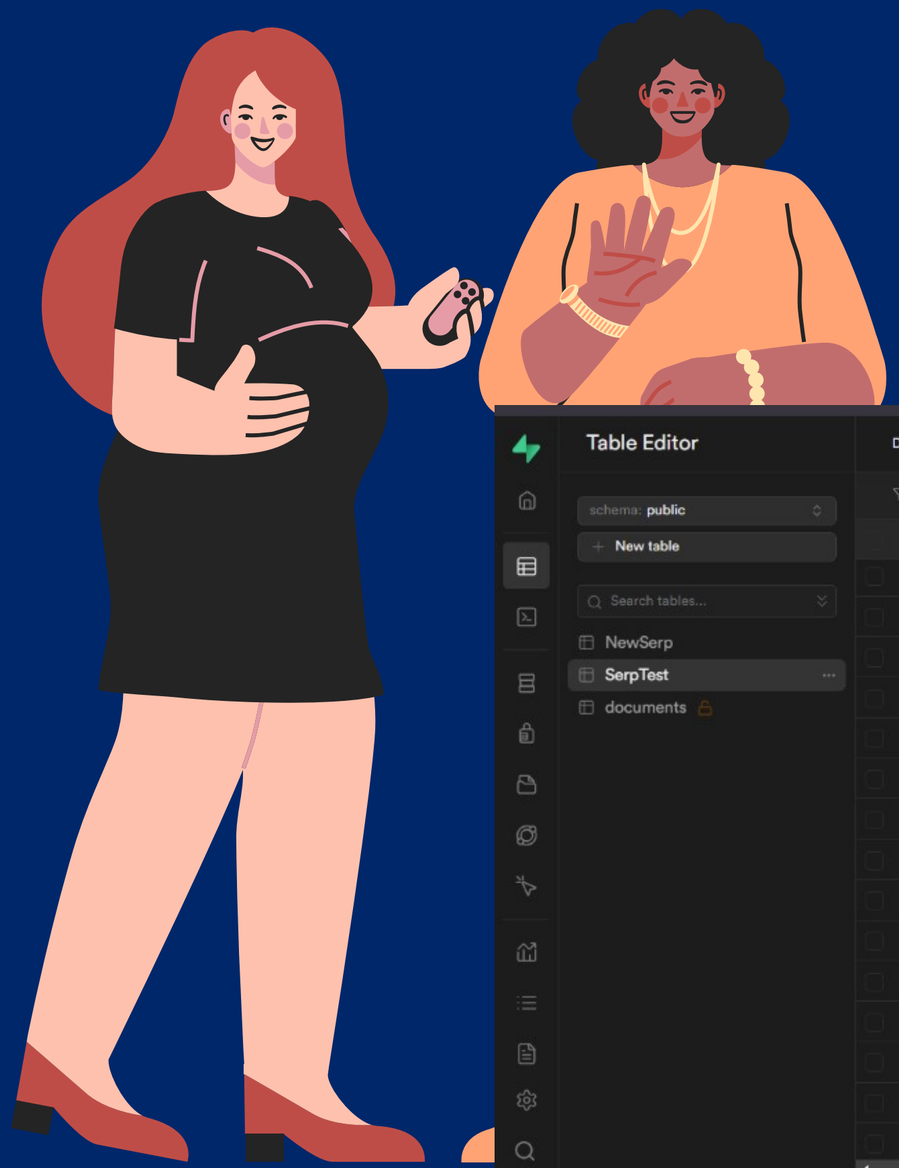
Gemini

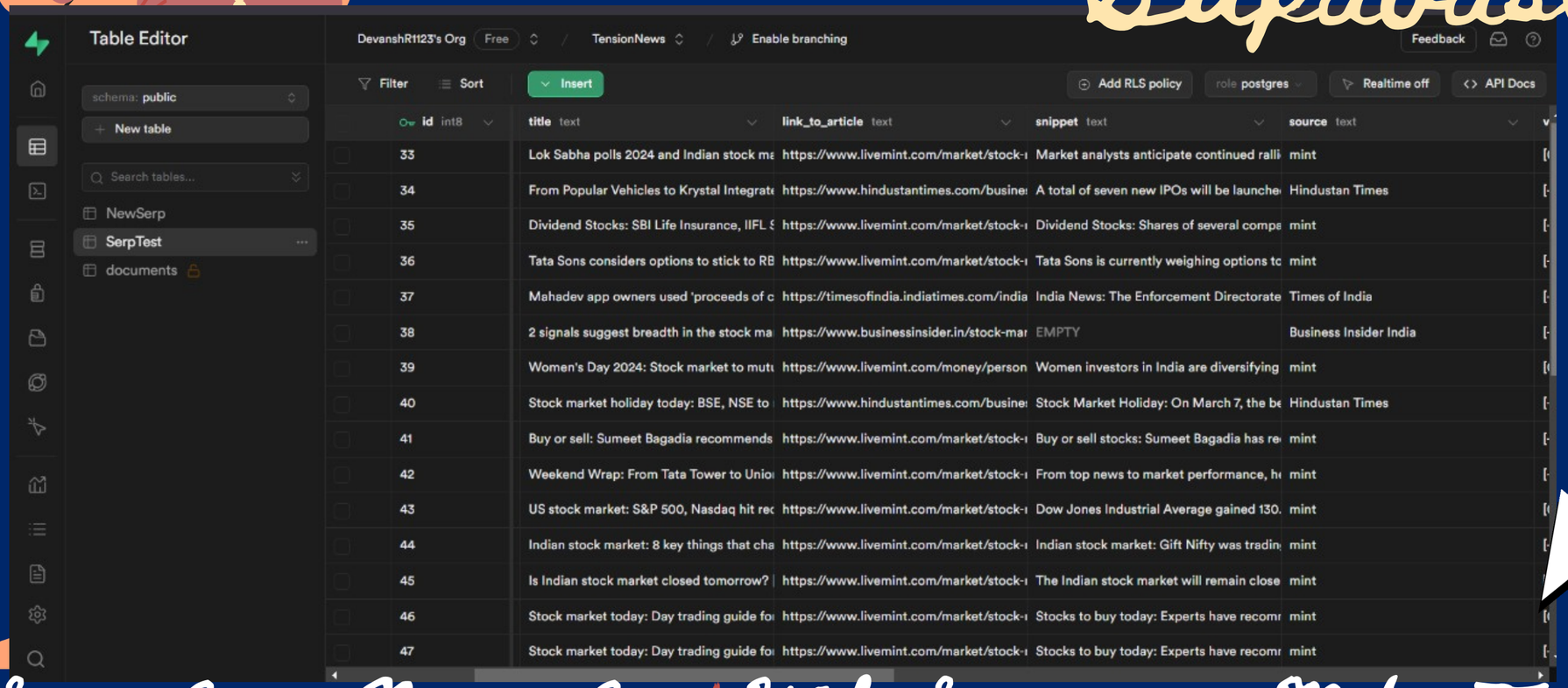
SerpApi

News API

MAKING OF DATABASE

Supabase





Serp Api + News Api + Web Scraping → Meta Tags

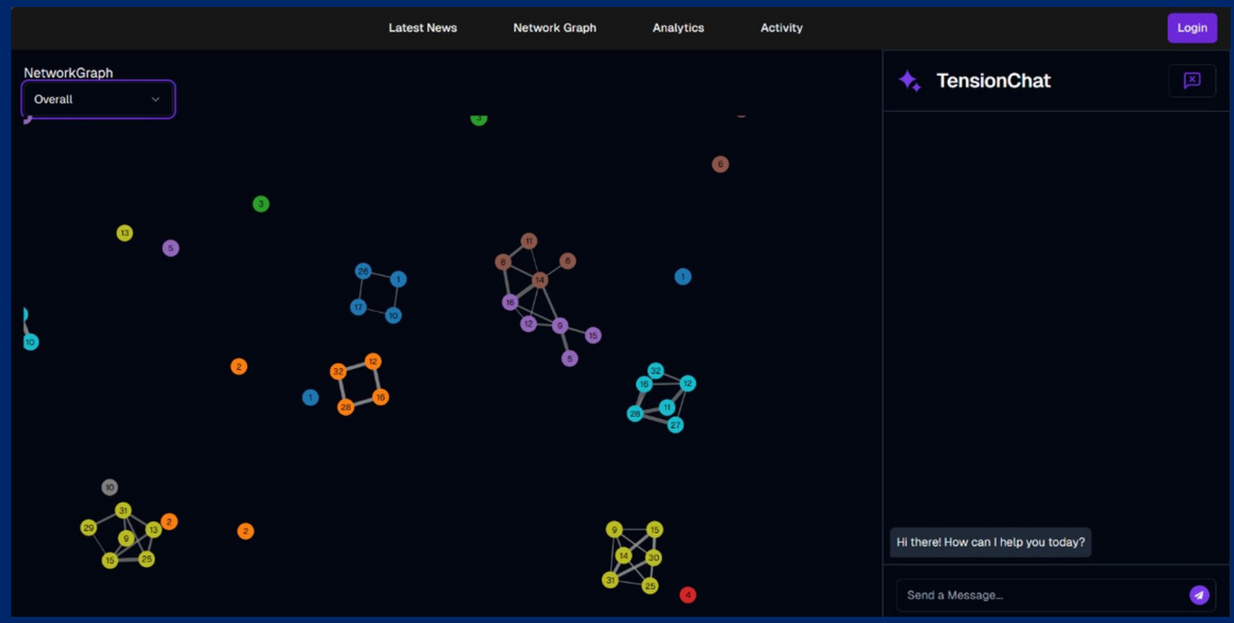
SIMILARITY MATRIX

```
 ...
 [0.         0.         0.         ... 1.         0.09090909 0.        ]
 [0.         0.         0.         ... 0.         0.         0.        ]
 [0.         0.         0.         ... 0.         0.         0.        ]]
[[1.         0.         0.         ... 0.         0.         0.0625    ]
 [0.         1.         0.         ... 0.         0.         0.        ]
 [0.         0.         1.         ... 0.         0.         0.        ]
 ...
```

Threshold >0.5

Threshold <0.9

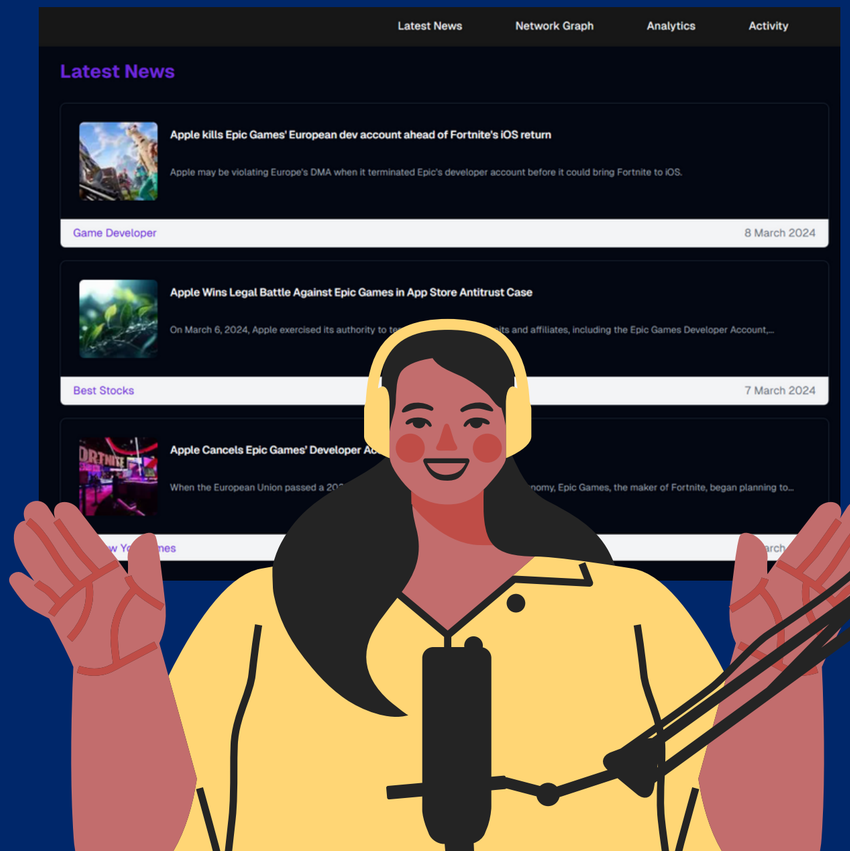
NETWORK GRAPH



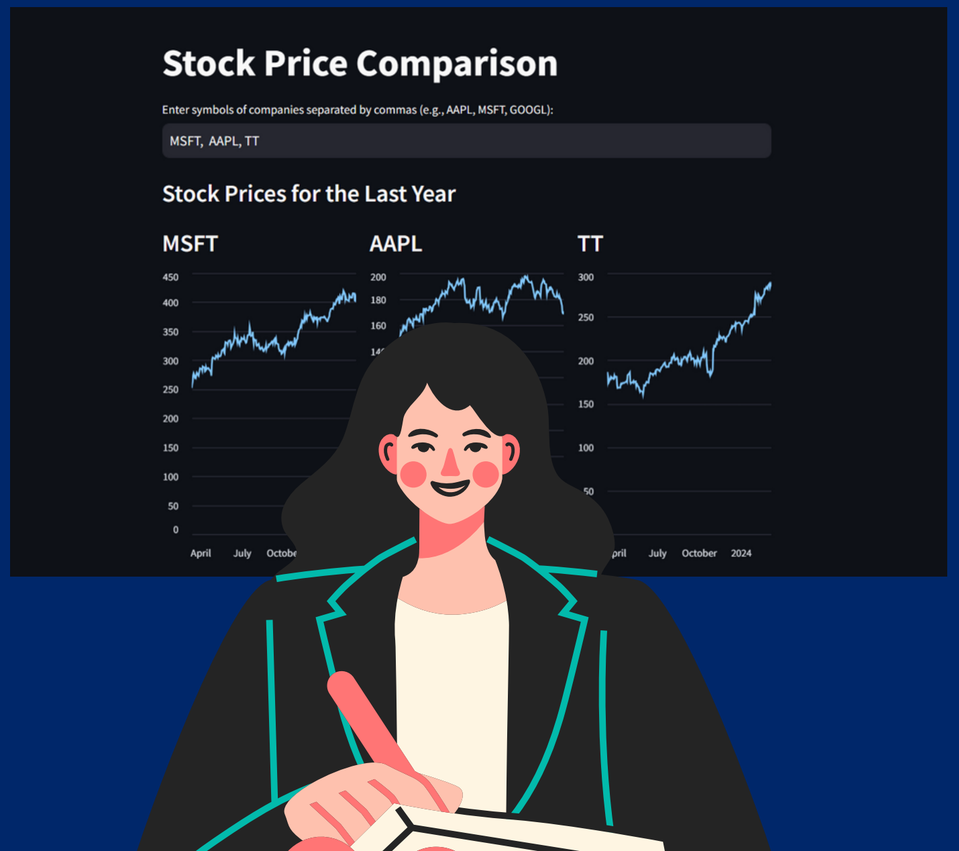
Clustering, Tags, Overall, Sentiments

FEATURES OF TENSION NEWS

Listing of Real-Time News



Stock Analysis



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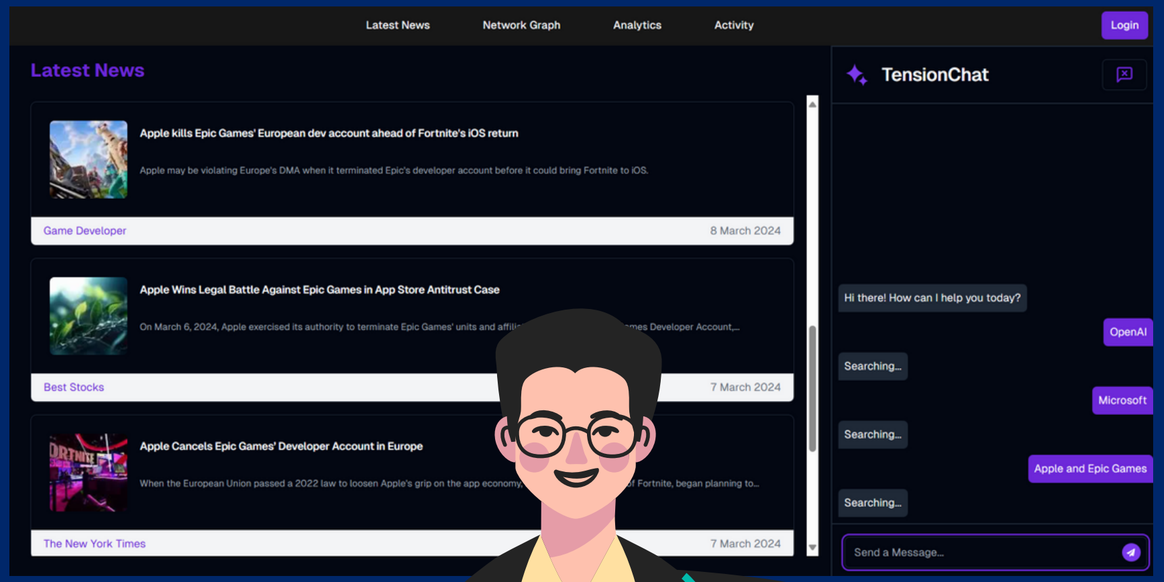
Chatbot



Text-to-Speech

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AI News Anchor

Youtube Scraper

```
19
20  search_query = "Stock exchange"
```

PROBLEMS PORTS OUTPUT DEBUG CONSOLE TERMINAL Code

```
PS C:\Users\Kashish Gandhi\Desktop\LOC\Main_frontend> python -u "c:\Users\Kashish Gandhi\Desktop\LOC\Main_frontend\TensionFlow_LOC-6.0\youtube_scraper\youtube_scraper.py"
Video 1 - Title: Explained | The Stock Market | FULL EPISODE | Netflix
  URL: https://www.youtube.com/watch?v=ZCFkWDdmXG8
  Thumbnail: https://i.ytimg.com/vi/ZCFkWDdmXG8/hq720.jpg?sqp=-oaymwEcCOgCEMoBSFXyq4qpAw4IARUAAIhCGAFwAcABBg==&rs=AOn4CLCprrR_uOXOpkd1695-YrGc1FeUiA


Video 2 - Title: How does the stock market work? - Oliver Elfenbaum
  URL: https://www.youtube.com/watch?v=p7HKvqRI_Bo
  Thumbnail: https://i.ytimg.com/vi/p7HKvqRI_Bo/hq720.jpg?sqp=-oaymwEcCOgCEMoBSFXyq4qpAw4IARUAAIhCGAFwAcABBg==&rs=AOn4CLDJLx6lTc9C1F2AV2Th31k1iuQOxw


Video 3 - Title: What is a Stock Exchange & Stock Market Index? BSE Sensex & NSE Nifty Index Explained in Hindi
  URL: https://www.youtube.com/watch?v=GT_auP0fh90
  Thumbnail: https://i.ytimg.com/vi/GT_auP0fh90/hq720.jpg?sqp=-oaymwEcCOgCEMoBSFXyq4qpAw4IARUAAIhCGAFwAcABBg==&rs=AOn4CLA-mHF0UcQSOUoV4nZ9QV5cKjTrcQ
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BUSINESS MODEL

White-Label Solutions

Offer white-label versions of our application to media companies, publishers, or other organizations that want to integrate real-time news analysis into their platforms.
Charge licensing or subscription fees for the white-label solution.

Freemium Model

Offer basic features, such as real-time news extraction and basic visualization, for free.

Subscription-Based Model

users pay a monthly of Rs. 299/- to access the full suite of features, including advanced analytics, personalized alerts, and enhanced visualization options

FUTURE SCOPE

Docker and Kubernetes

For scaling our software as the number of users and load on our server increases. These softwares will also take care of software isolation and cross-enviornment functionality.

Impact Assessment of news

Employing advanced algorithms for real-time impact assessment, predictive insights, and user-driven feedback

Integration with Emerging Technologies

Explore integration with emerging technologies such as augmented reality (AR) and virtual reality (VR) to enhance the user experience. Users might visualize the network graph in a 3D space, providing a more immersive and interactive way to explore interconnected events.

THANK YOU