Mention Monitoring



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Motivation

The application is specifically designed to assist businesses in effectively monitoring, analyzing, and understanding customer sentiments and feedback gathered from social media platforms and review websites.

This innovative application is a valuable tool for businesses looking to monitor and analyze customer sentiment effectively, ultimately helping them improve customer satisfaction, brand reputation, and business growth.

Objective

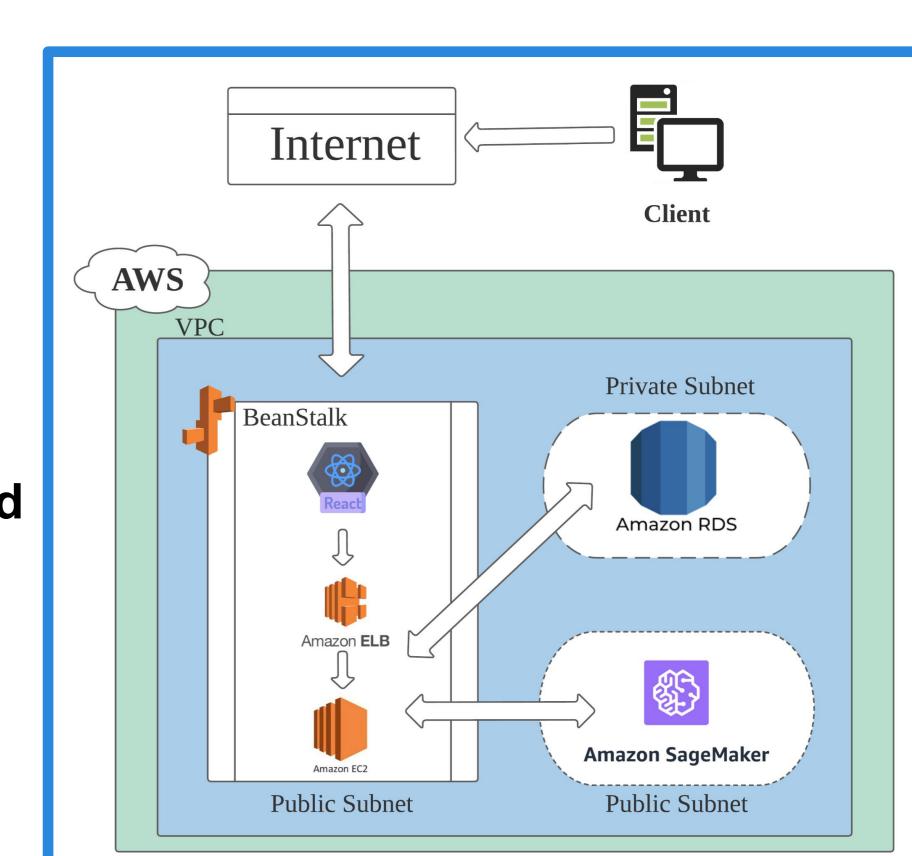
Our solution offers a holistic approach with four core functionalities: Automated Monitoring, Advanced Data-Visualization, Intelligent-Summarization, Self-Sentiment Analysis.

Approach

The presentation layer features a sleek, interactive user interface, which was designed using the React framework and Material UI libraries.

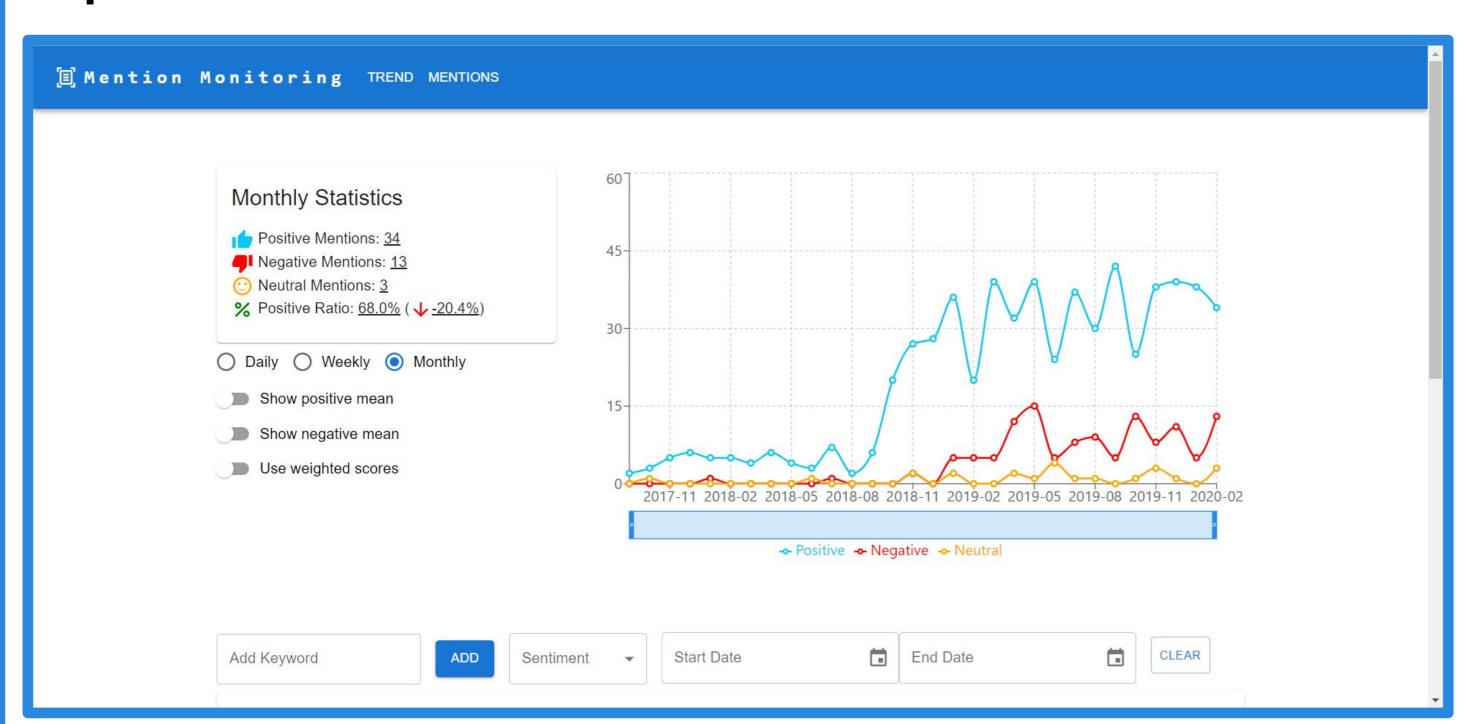
In the application layer, we built RESTful APIs with Java Spring Boot to handle user requests and integrated NLP models for sentiment analysis and summarization of social media mentions. We selected cardiffnlp/twitter-xlm-roberta-base-sentiment for sentiment analysis and knkarthick/meeting_summary for comment summarization. To expedite inference speeds, these two models were deployed on AWS SageMaker with ml.m5.xlarge instances.

For the data layer, we implemented a MySQL database on AWS RDS to ensure high availability and scalability, providing a solid foundation for our application's data management needs.

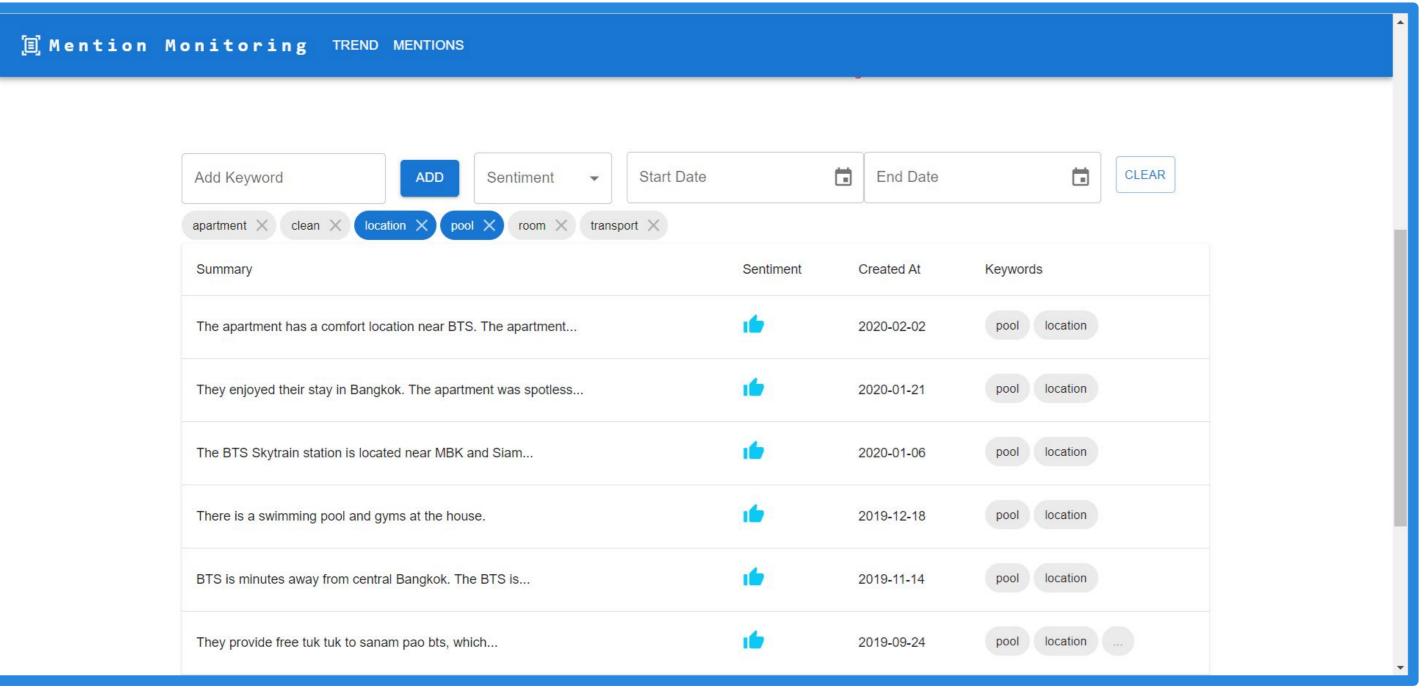


Implementation

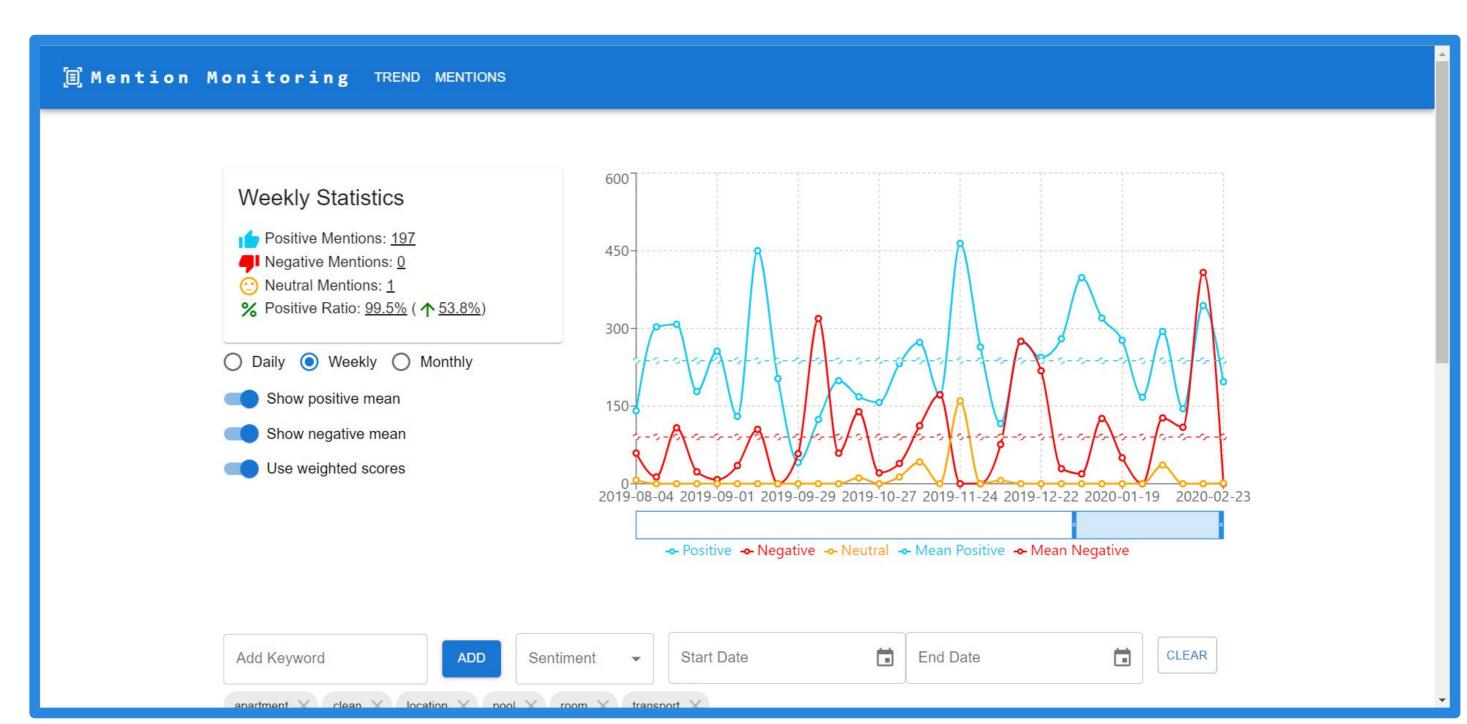
Summarization



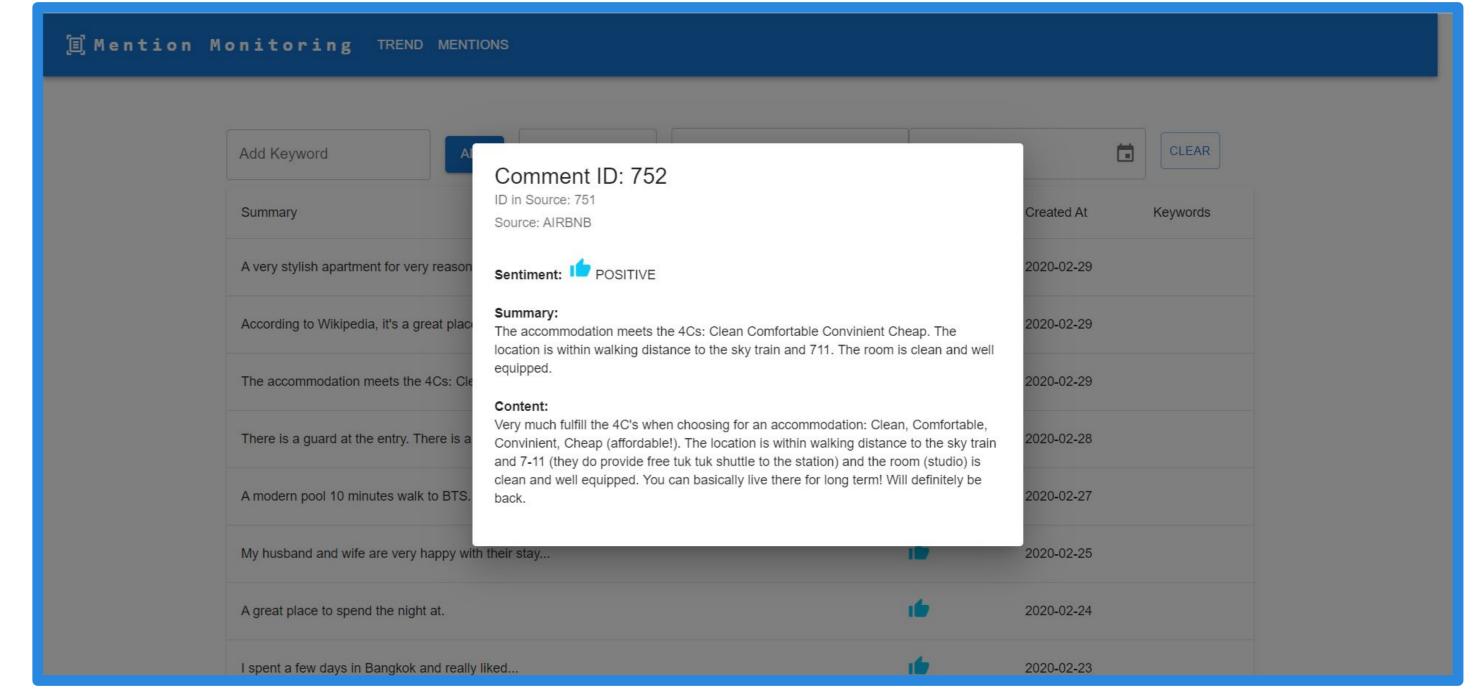
Trend Analysis



Comments Overview with Filters



Weighted Trend Analysis with Mean



Comment Detail

Service	Pricing Model	Price/Volume	Service	Pricing Model	Price/Volume
Basic Comment Seizing	Flat fee	\$19.99 per month/ \$95.99 per 6-months/ \$155.99 per 12-months	All Included Plan	Subscription-based	\$44.99 per month/ \$249.99 per 6-months/ \$499.99 per 12-months
Auto-Sentiment Analysis	Volume-based	\$0.1 per comment	On-site/online training and Freemium support		-
Volume-based Comment	Volume-based	\$0.1 per comment			