

Headliners

Sagar - Akshay - Saumya - Anusha - Pratyush

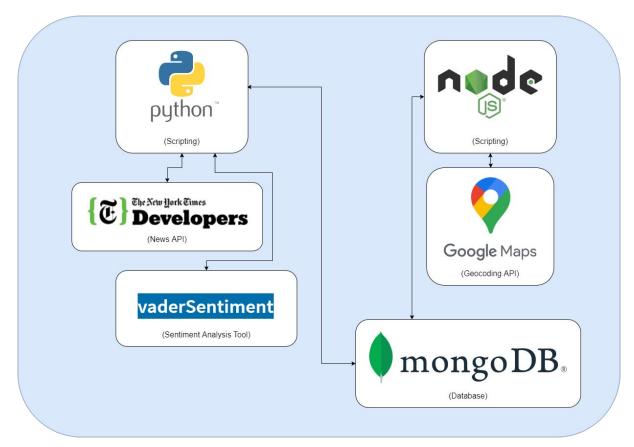
Introduction

- News Buff is an interactive world map of global news
- News pins are populated on the map depending on the user inputs year, month, day, query
- Each news article's location is geocoded and shown on the map
- Sentiment analysis is done on each news article to calculate a sentiment score from -1 to 1
- Each location has an average sentiment score and shows its articles
- Share article via Social Media

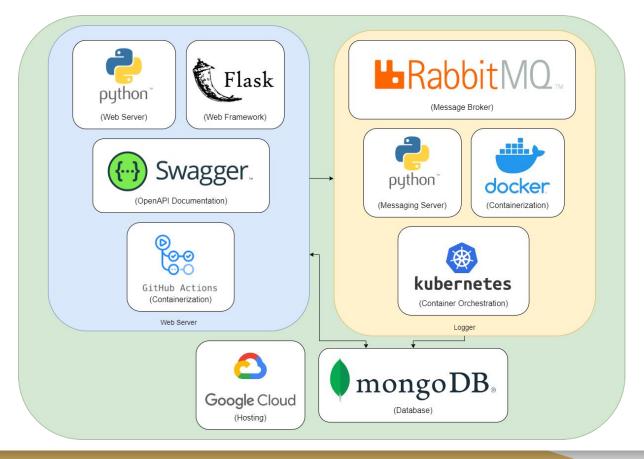
Demo- newsbuff.ml



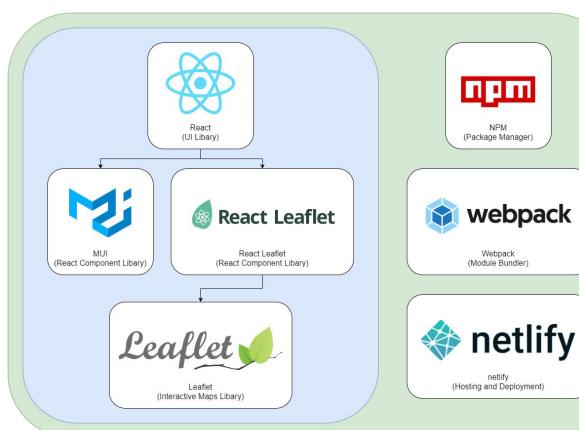
Backend Data Fetch Architecture



Backend Server Architecture



Frontend Architecture



Project Management/Development Tools











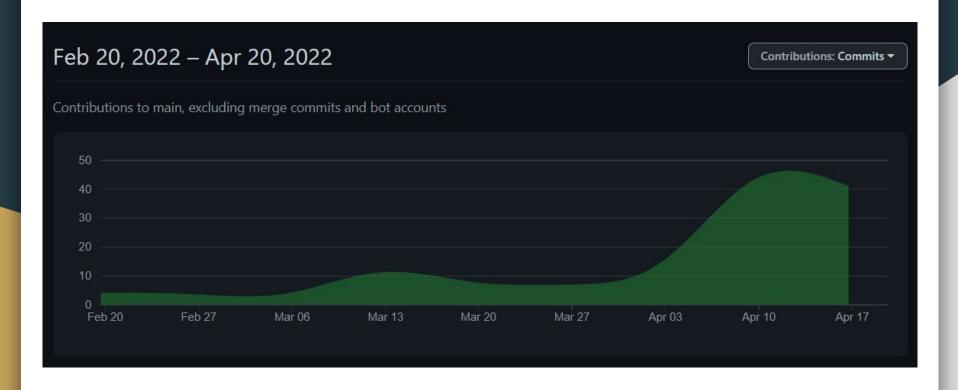




Project Management



Backend Commits



Frontend Commits



Let's talk **Scale**

3,590,557 News Articles from

122 Years = **1,464** Months from

78,021 Locations

Let's talk **Scale**

- **~6 hours** Fetching Articles
- **~8 hours** Bulk Geocoding
- **~4 hours** Database Queries
- **~3 hours** Sentiment Analysis

Challenges

- Requirements updated every sprint
- Restrictions on APIs- cost and rate limits
- Bulk Geocoding- Node.js asynchronous fault tolerant fetch script
- Slow queries due to size of data- small room for error

Future Work

- Responsiveness- Mobile support
- Multiple news sources
- Accessibility- Support different languages, speech to text, theme selection
- Personalized news recommendations based on user history

Headliners



Anusha Basavaraja
Backend
Hosting & Deployment



Saumya Bansal Backend Hosting & Deployment



Sagar Pathare
Team Lead
Project Management
UI/UX Design & Prototyping
Backend & Frontend
Hosting & Deployment



Akshay Abhyankar
Backend
Hosting & Deployment



Pratyush Thota
Frontend
UI/UX Design

Thank you!

Questions?