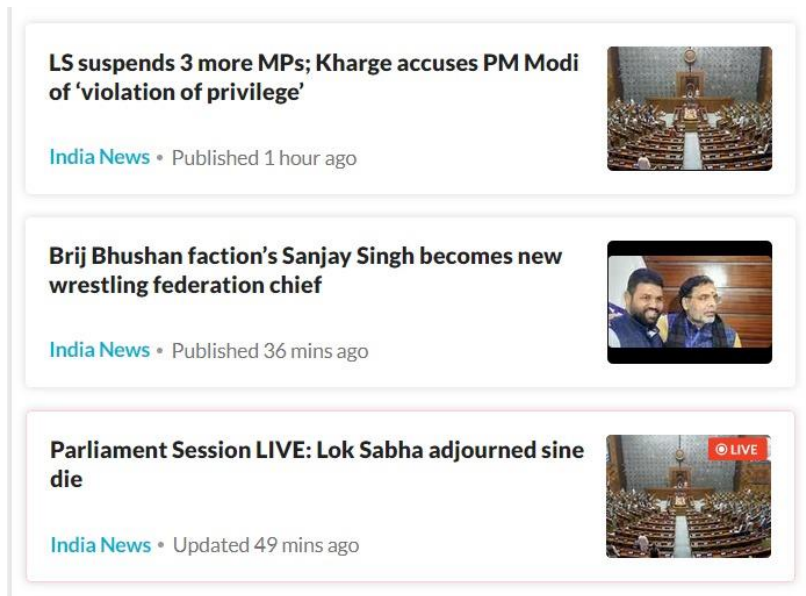# CONVO_AI PROJECT

(Sem-5)

2021-2025

THAPAR INSTITUTE
OF ENGINEERING & TECHNOLOGY
(Deemed to be University)

Team Details:

- Saksham Singla 102103298
- Sheral Singla 102103300

Data Collection technique used and data description:

1. We have used BeautifulSoup Library and Web Scraped the data from https://www.hindustantimes.com/

2.

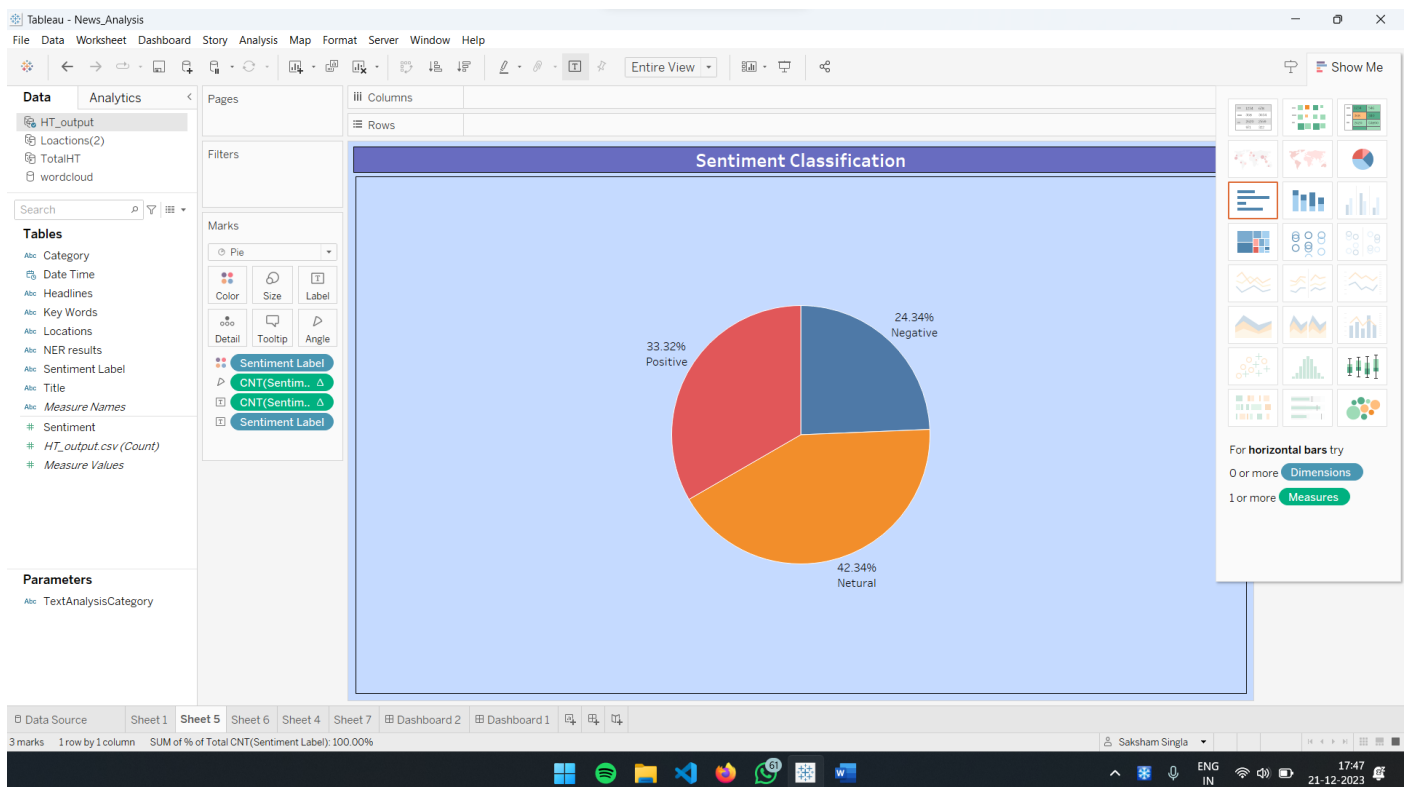| Title	Date Time	Category
N/A	Published on Dec 20, 2023 02:16 PM IST	competitive exams
AIBE 18 answer key: Objection window closes today, link here	Published on Dec 20, 2023 01:44 PM IST	competitive exams
Rajasthan Police Constable PET/ PST admit card out at police.rajasthan.gov.in	Published on Dec 20, 2023 01:43 PM IST	competitive exams
NVS class 6th phase II admit card released at navodaya.gov.in, direct link here	Published on Dec 20, 2023 01:12 PM IST	competitive exams
Central Bank of India Safai Karmachari Recruitment 2023: Apply for 484 posts	Published on Dec 20, 2023 12:44 PM IST	employment news
CSIR UGC NET 2023 exam city slip out at csirnet.nta.ac.in, direct link here	Published on Dec 20, 2023 12:11 PM IST	competitive exams
NTA SWAYAM July 2023 result declared at swayam.nta.ac.in, direct link here	Published on Dec 20, 2023 11:20 AM IST	exam results
AIIMS INI CET 2023 seat allotment result for Round 2 out, link here	Published on Dec 20, 2023 10:45 AM IST	admissions
Bihar DLRS Result 2023 for Survey Kannoongo, Amin & other posts results out	Published on Dec 20, 2023 10:14 AM IST	exam results
Vocabulary Made Easy series: Hone your verbal skills for competitive exams today	Published on Dec 20, 2023 09:41 AM IST	competitive exams
KSET 2023 registration date extended till today, apply at kea.kar.nic.in	Published on Dec 20, 2023 09:40 AM IST	competitive exams
SSC JE Exam 2023: Option-cum-preference submission window opens at ssc.nic.in	Published on Dec 20, 2023 09:07 AM IST	competitive exams
UPSC NDA & CDS I Examination 2024: Notifications releasing today at upsc.gov.in	Published on Dec 20, 2023 08:31 AM IST	competitive exams
Study at Shiv Nadar University, admission open for next academic session	Published on Dec 19, 2023 08:15 PM IST	admissions
N/A	Updated on Dec 19, 2023 07:27 PM IST	competitive exams
NTRO Recruitment 2023: Apply for 74 Scientist 'B' vacancies from Dec 21	Published on Dec 19, 2023 07:10 PM IST	education
JKSSB Sub Inspector PST/PET 2023 result released at jkssb.nic.in	Published on Dec 19, 2023 06:28 PM IST	employment news
Rajasthan High Court to recruit for 230 System Assistant posts	Published on Dec 19, 2023 05:02 PM IST	employment news
UPSC Civil Services 2023 interview schedule out at upsc.gov.in, notice here	Updated on Dec 19, 2023 08:14 PM IST	competitive exams
AAI Junior Executive 2023 admit card released at aai.aero, here's direct link	Published on Dec 19, 2023 03:45 PM IST	competitive exams
JKSSB 2023 releases admit card for various post at jkssb.nic.in, here's link	Published on Dec 19, 2023 03:22 PM IST	competitive exams
Cracking job interview series: The top five tips to crack your dream interview!	Published on Dec 19, 2023 02:31 PM IST	employment news
AISSEE 2024 registration ends tomorrow, apply at exams.nta.ac.in	Published on Dec 19, 2023 02:10 PM IST	competitive exams

3.

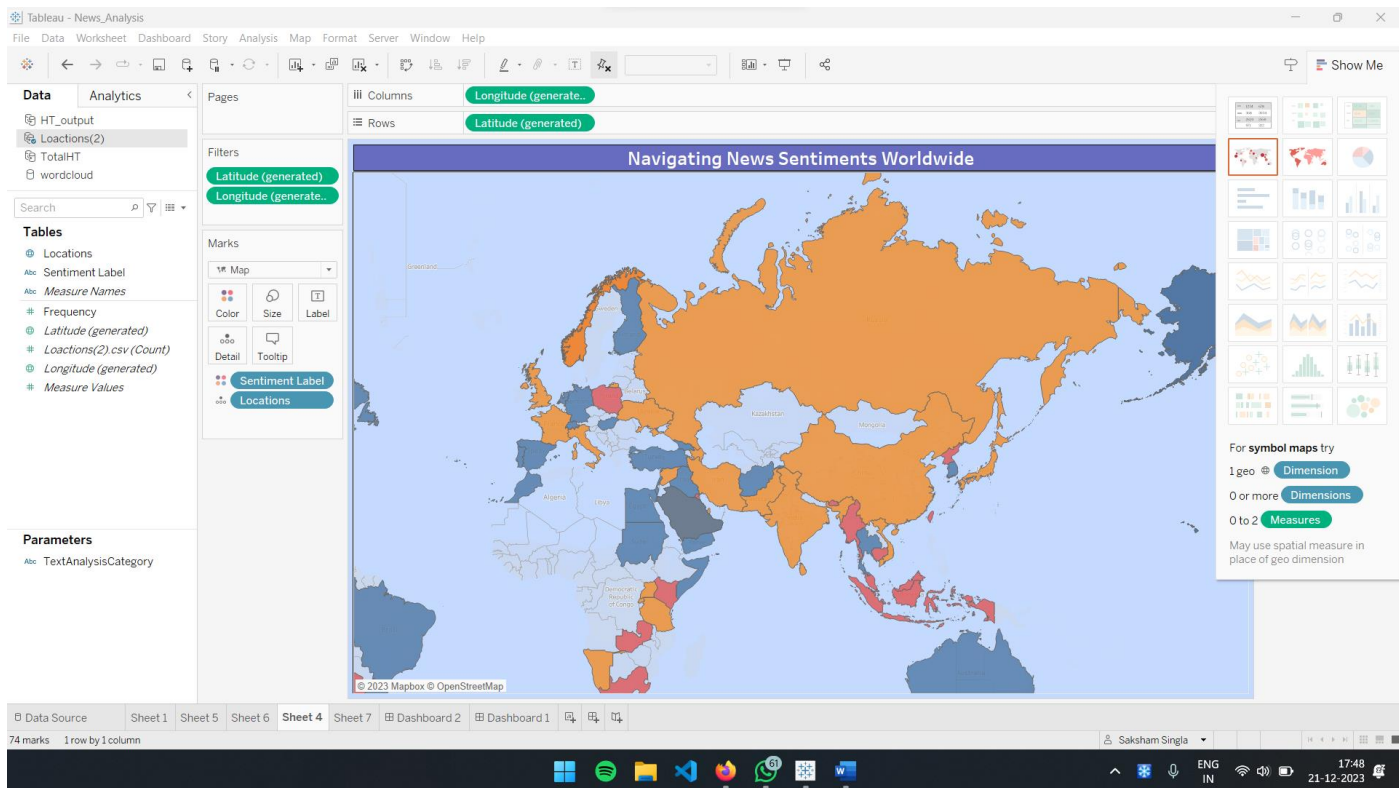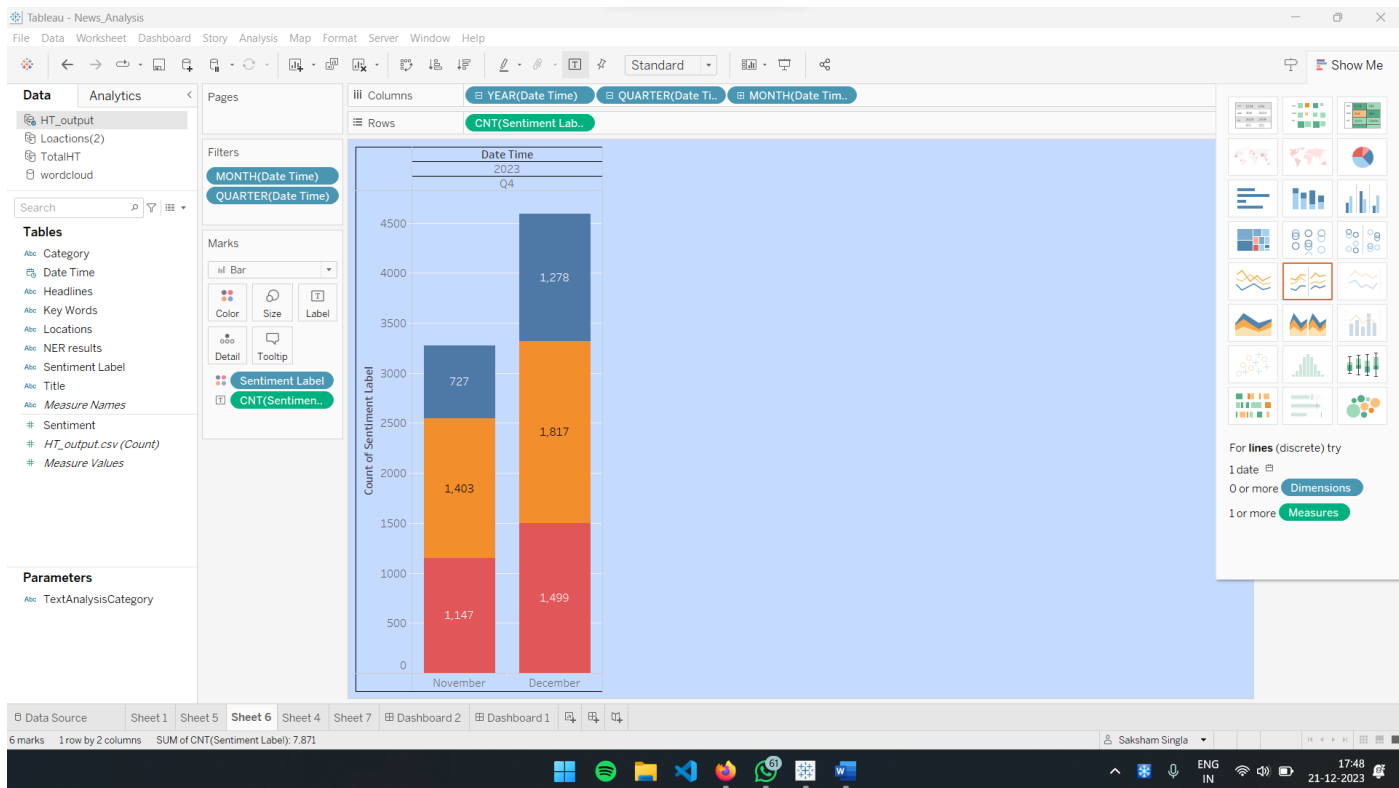4. We have 3 features in our dataset :-

- **Title**- Contains News Headlines.
- **Date Time**- Contains the date and time of news published.
- **Category**- Contains the Type of News displayed.

Data Pre-processing techniques applied:

1. We have applied
   - Lowercasing.
   - Tokenization.
   - Stopwords Removal.
   - Remove punctuation and special characters.
   - Lemmatization.

2. Now we have used SentimentIntensityAnalyzer() to calculate Sentiment Scores.
   For < -0.5 "Negative" and > 0.5 "Positive" else "Neutral", (COMPOUND SCORE)

3. Used SpaCy's NER(Named Entity Recognition) component which is capable of identifying entities such as persons, organizations, locations, medical codes, monetary values, percentages, and more in text documents.

4. Used SpaCy's NER for detecting Locations and use it for Plotting **GeoSpatial Analysis**.

5. Created **Word Cloud** using the Recognized entities such as Persons, Organizations and via maintaining their frequencies.

6. Created **Pie Chart** on the basis of overall sentiment for the months of November and December.

7. Created **Bar Graph** from the months of November , December and their relationship with Different Sentiments.

8. Created **Packed Bubbles** to visualize the different Categories of News.

Snapshots of all forms of dashboard:

FINAL DASHBOARD:

Link to Dashboard:

https://public.tableau.com/shared/R8X8NKTXG?:display_count=n&:origin=viz_share_link