# FERRAGNI BALOGO

Giorgia Costantini 782261 Andrea Marcoccia 775451 Filippo Navarra 782571



### Sources



#### **INSTAGRAM & FACEBOOK**

APIFY.com for Facebook.

Exportgram.net for
Instagram --> limit of 100
comments per post



#### REDDIT

PRAW library to access
Reddit, fetching comments
from specific posts
identified by their IDs, then
organizing this data into a
DataFrame



#### **NEWS ARTICLES**

Collected web articles via URLs and processed them with the *Newspaper3k* tool to isolate and analyze text content

# SENTIMENT ANALYSIS

#### FEEL-IT

- FINE-TUNE OF BERT (ONE OF THE MOST POPULAR NEURAL ARCHITECTURES IN NLP)
- FINE-TUNED ON 2037 TWEETS IN ITALIAN
- LOW ACCURACY

#### MISTRAL API

- INPUT DATA IS CONVERTED IN A PROMT SENT TO THE API
- THE MODEL IS ASKED TO CLASSIFY INPUT DATA INTO 'POSITIVE', 'NEUTRAL' OR 'NEGATIVE'
- HIGH ACCURACY ON INSTAGRAM
- LOW ACCURACY ON REDDIT

#### BERT-BASE-ITALIAN-CASE-SENTIMENT

- FINE-TUNE OF BERT
- FINE-TUNED ON 45K PREPROCESSED TWEETS
- LOW ACCURACY

LACK OF ACCURATE SENTIMENT ANALYSIS MODELS
TO RECOGNIZE ITALIAN LANGUAGE FREELY
AVAILABLE ON THE WEB

**LLM** (LARGE LANGUAGE MODEL) SO IT BETTER UNDERSTAND ITALIAN

# Difficulties

#### **SCRAPE SOCIAL MEDIAS**

Instagram and Twitter have restrictive policies

#### **LABEL DATA**

How can we be sure of the data sentiment labeling?

## FINAL GOALS

- NEWSPAPERS TITLE TRENDS
- MAIN TOPICS OF DISCUSSION (NEWSPAPERS)
- DIFFERENT SENTIMENTS FROM DIFFERENT SOURCES
- OVERALL SENTIMENT TO THE "SCANDAL"
- SENTIMENT OVER TIME OF FERRAGNI'S FANS (100 COMMENTS PER POST)