

SmartTrendAI - Project Report

Title: AI-Powered Market Trend Analyzer (Stable)

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Aim:

Build a system that analyzes online text (tweets, news, reviews) to detect trending topics and sentiment for marketing insights.

Tools:

Python, NLTK, VADER, scikit-learn, matplotlib, streamlit

Workflow:

Data collection -> Preprocessing -> Sentiment analysis -> Trend detection -> Visualization

How to run:

1. Install requirements: pip install -r requirements.txt

2. Console demo: python src/main.py

3. Web app: streamlit run app.py

Notes:

This build includes automatic NLTK downloads in preprocessing to avoid LookupError on fresh environments.