

Reelo Technologies (AI Internship):

Assignment documentation

1. What was your approach?

The objective was to help small businesses gain insights from their Google Reviews using an AI-powered prototype. My approach focused on building a tool that extracts key topics and analyzes sentiment trends over time from customer reviews. I chose to work in a Jupyter Notebook(.ipynb) to rapidly prototype the logic and visualizations while using NLP techniques for natural language understanding.

2. What tools did you use and why?

- ❖ **Python (Jupyter Notebook):** Ideal for rapid prototyping, data processing, and visualization.
- ❖ **Pandas:** For loading and manipulating review data from CSV file.
- ❖ **VADER Sentiment Analyzer (via NLTK):** A sentiment analysis tool that performs well on short, informal text like customer reviews.
- ❖ **KeyBERT:** A lightweight keyword extraction model that uses BERT embeddings to extract high-quality, meaningful phrases directly from review text.
- ❖ **Matplotlib & Seaborn:** For creating visualizations like sentiment distribution and trends over time.

3. What challenges did you face?

- Ensuring the model handled noisy or mixed-language reviews well.
- Managing datetime formatting and grouping logic when plotting trends.

4. How would you take this further if you had more time?

Given more time, I would:

- Automate Weekly Summary Reports with top positive/negative reviews and key themes.
- Deploy the tool as a web app using Streamlit or Replit for real-time use by businesses.