

AI IGNITE WEEK

Technical Track

TASK 1: SIMPLE SENTIMENT ANALYZER

Problem Statement:

Build a tool that reads customer reviews or social media comments and tells you if people are happy, angry, or neutral about a product or service.

What You'll Build:

A sentiment analyzer that:

- Takes text input (reviews, tweets, comments)
- Uses a pre-trained AI model (no training needed!)
- Shows positive, negative, or neutral sentiment
- Creates simple charts to visualize results

Simple Approach:

`pip install pandas matplotlib textblob` # Using TextBlob instead of transformers.

Steps:

1. **Collect or create data:** Get 30-50 sample reviews/comments
 - **Option A:** Use fake data (restaurant reviews, product feedback)
 - **Option B:** Copy real reviews from Google/Amazon (for practice only)
2. **Analyze sentiment:** Use Text Blob (super simple, 2 lines of code)

Python:

```
from textblob import TextBlob

sentiment = TextBlob("This product is amazing!").sentiment.polarity

# Returns: 0.5 (positive) or -0.3 (negative) or 0.0 (neutral)
```

3. Categorize and count:

- Positive: score > 0.1

- Negative: score < -0.1
- Neutral: everything else

4. Visualize: Create a simple pie chart

Sample Data:

Sentiment Summary:

- Positive: 45 reviews (60%)
- Neutral: 18 reviews (24%)
- Negative: 12 reviews (16%)

Top Positive Words: amazing, love, great, excellent

Top Negative Words: terrible, slow, disappointed, bad.

Additional Resource:

https://youtu.be/DedS74YKhs4?si=6o_pp2L257EZ8EO6