



# API for Apple Store Review Analysis

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## Script `app_review_analyzer.py`

- App Review Analyzer: a Python CLI tool that fetches App Store reviews (via SerpApi), saves them to JSON, and logs progress.
- Core Analyses: computes rating distribution (negative/neutral/positive), runs NLP sentiment classification, and extracts top negative-review keywords with KeyBERT & YAKE.
- Optional Clustering: summarizes negative reviews and groups them into user-defined clusters for thematic insights.
- Results Delivered: JSON files of raw reviews, sentiment-labeled data, keyword lists, and text clusters.
- To run locally, create a file named `serpapi_api_key.txt` and paste your API token into it ([link](#)). Note that registration requires mobile-phone verification, but for some reason it does not work with Ukrainian numbers. Write to customer support via their chat to complete your signup.

# Nebula: Horoscope & Astrology Analysis

- Average rating: 4.2 / 5
- Based on the last 1 000 reviews:
  - Positive: 42.8 %
  - Neutral: 35.0 %
  - Negative: 53.7 %
- Keyword analysis (KeyBERT & YAKE):
  - Negative comments frequently include “subscription”, “charged”, “cancel”, “money”, “scam”, “trial”, “car”, “pay”, “refund”, “free”.
- Cluster analysis:
  - Main pain points: high monthly subscription cost and difficulty cancelling
  - Other feedback: some users complain about poor advice; others say the descriptions are accurate for them
- Recommendations:
  - Publish a clear, step-by-step guide on how to cancel subscriptions
  - Offer targeted promotions or special deals to boost retention



# Co-Star Personalized Astrology Analysis

- Average rating: 4.8 / 5
- Based on the last 100 reviews:
  - Positive: 38%
  - Neutral: 14%
  - Negative: 48%
- Keyword analysis (KeyBERT & YAKE):
  - Negative comments frequently include “update”, “new”, “access”, “error”, “daily”, “crashing”, “logged”.
- Cluster analysis:
  - Main pain points: App errors and crashes following recent updates
  - Other feedback: Incorrect predictions/descriptions for a zodiac sign



# Summary

1. Created a CLI API for App Store review analysis, providing sentiment analysis, rating statistics, and NLP-based clustering.
2. Analyzed reviews for “Nebula: Horoscope & Astrology” and “Co–Star Personalized Astrology.”
3. Nebula: main negatives are unclear unsubscribe steps and high subscription prices. Recommended offering targeted promotions for users considering cancellation and publishing a clear, step-by-step unsubscribe guide.
1. Co–Star: main negative is app crashes after recent updates. Recommended strengthening QA pre-release testing to improve stability.