Smartphone Recommendation System using 91 Mobiles Ratings with YouTube Reviews

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Abstract:

In the contemporary era, smartphones have become indispensable, and selecting the right device from a myriad of options is increasingly complex for consumers. This project aims to develop an intelligent smartphone recommendation system leveraging data from 91mobiles ratings and YouTube review video metrics, such as likes and views ratios. The core technologies employed in this system are Large Language Models (LLMs) and Generative AI (GenAI), which provide robust capabilities in data processing and natural language understanding. To construct the recommendation system, data was retrieved through web scraping from the 91mobiles website, capturing extensive user ratings and reviews. Additionally, the YouTube API was utilized to gather metadata from review videos, including the number of likes, views, and other engagement metrics, which are indicative of public sentiment and video popularity. The recommendation engine integrates these datasets, using LLMs to analyse and interpret textual reviews from 91mobiles, extracting nuanced sentiment and key features of various smartphone models. Concurrently, GenAI models evaluate YouTube metrics to gauge the credibility and popularity of reviews, offering a comprehensive understanding of consumer preferences and expert opinions. This multi-faceted approach ensures that the recommendation system is not only data-rich but also contextually aware, providing users with personalized and reliable smartphone suggestions. By synthesizing user-generated content and social media engagement, the system can identify trends and preferences with higher accuracy, ultimately enhancing the decision-making process for prospective smartphone buyers. Through the application of cutting-edge AI technologies, this project demonstrates the potential of combining user feedback and social media analytics to create an advanced recommendation system, reflecting the evolving landscape of consumer technology and digital influence. The successful implementation of this project will pave the way for more sophisticated and user-centric recommendation systems across various domains.

Keywords:

Smartphone recommendation system, 91mobiles ratings, YouTube review videos, Large Language Models (LLMs), Generative AI (GenAI), Web scraping, YouTube API.