2025

NLP_Sentiment Analysis

By

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What is sentiment analysis?

- The process of determining the emotional tone behind a body of text.
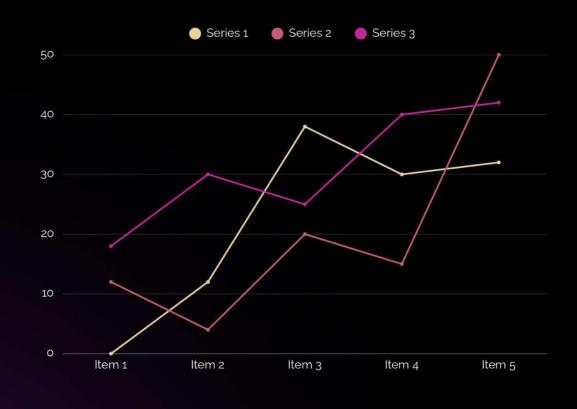- Classifying text as positive, negative, or neutral.

Why is Sentiment Analysis Important for App Reviews?

- Understanding user opinions and feedback.
- Identifying areas for improvement in the app.
- Tracking public perception and reputation.
- Making data-driven decisions for product development and marketing.

Project Goal:

To build and evaluate different machine learning models, NLP based analysis to classify app reviews into positive, negative, and neutral sentiments.

Series 1   Series 2   Series 3

Data Collection

- Date,Title,Review,rating,username,helpful_review,pla form,language,version,verified_purchase
- With these attributes we got the attributes we performing the sentiment analysis
- Choosing the appropriate attributes that are necessary for the model building

Flow Chart

2025

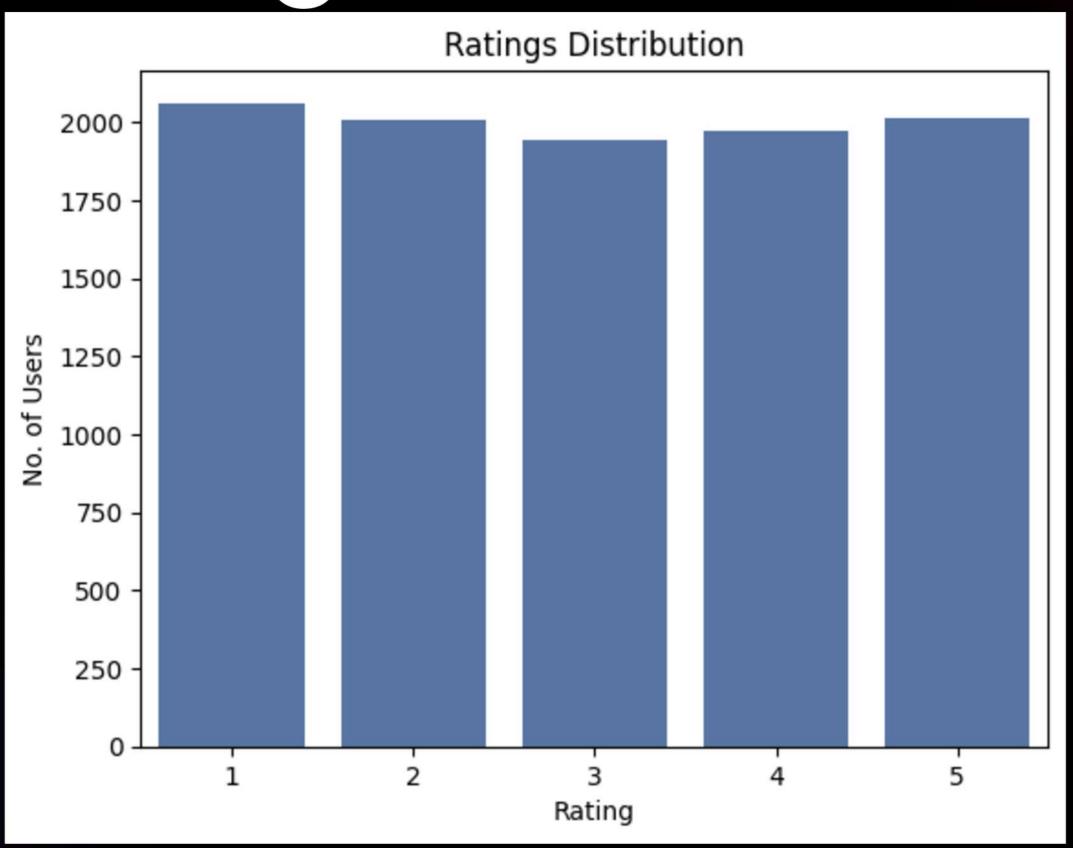**Data Loading and Initial Exploration**

Market Exploratory Data Analysis (EDA)

Data Preprocessing

Sentiment Mapping

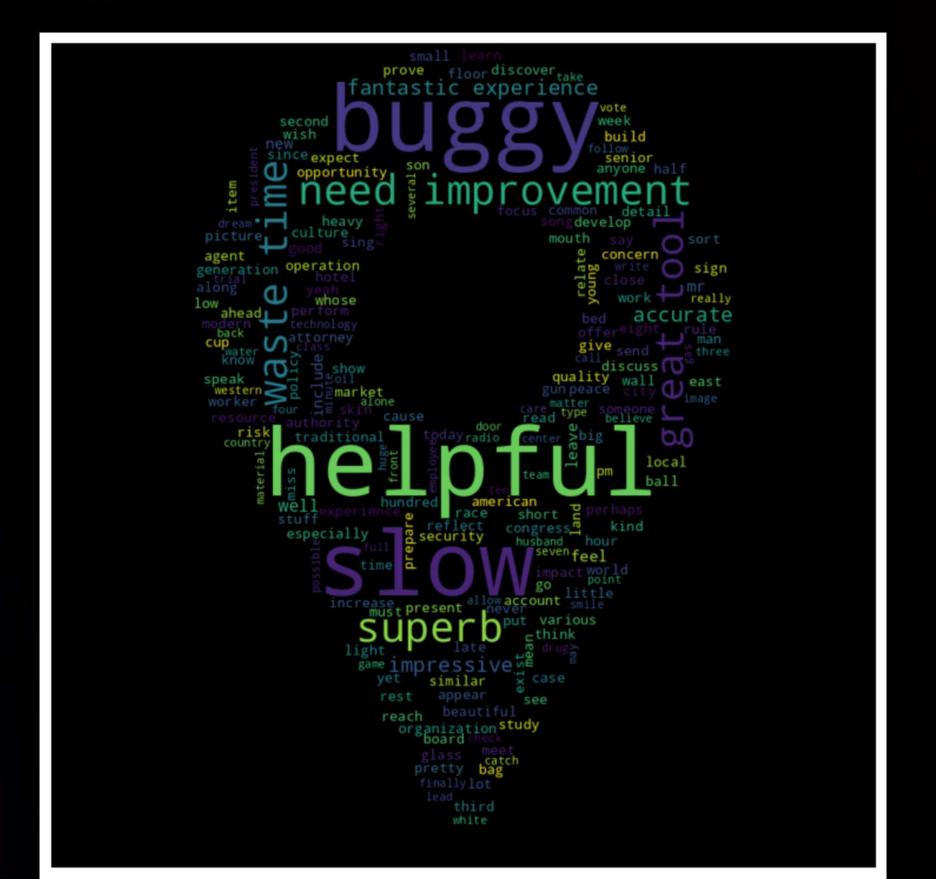**Sentiment Analysis Model - Setup**

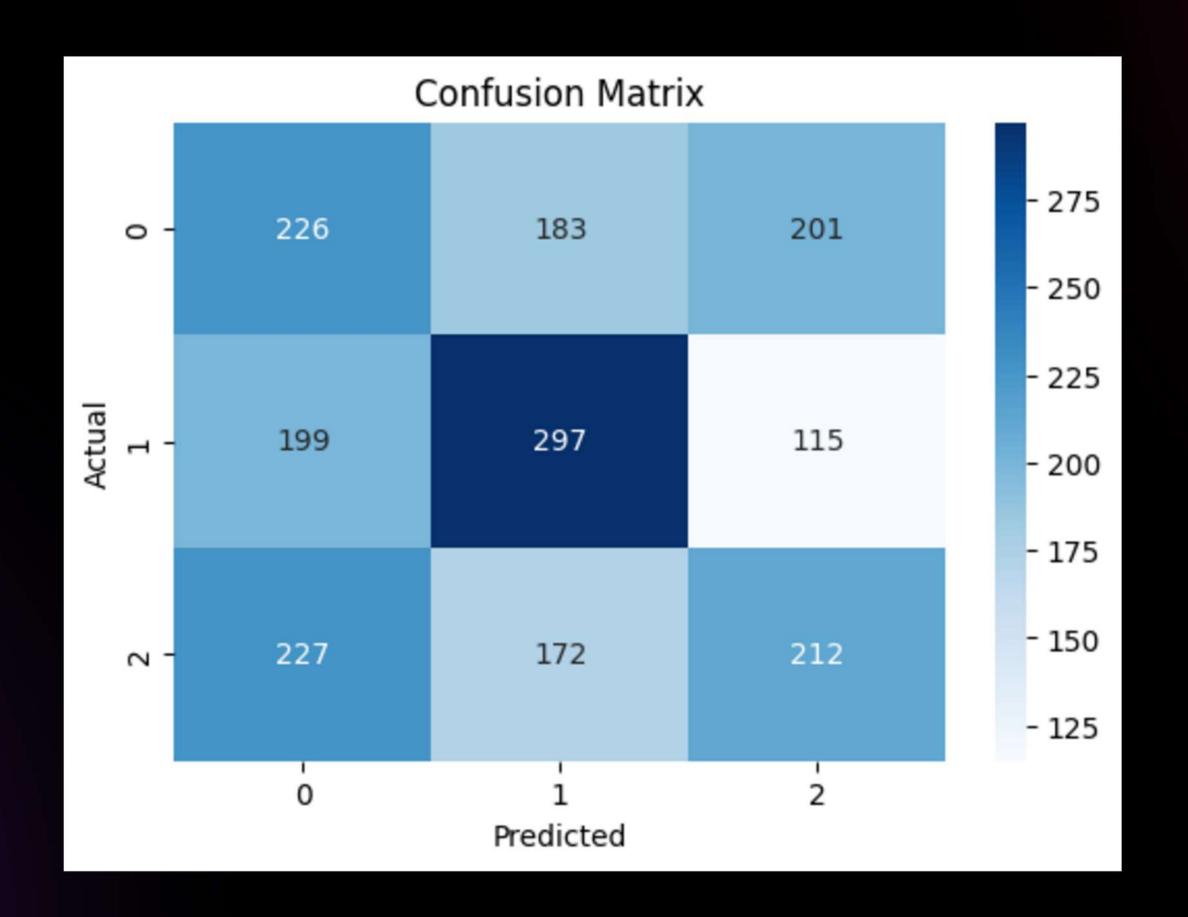# Ratings Distribution

Positive sentiments
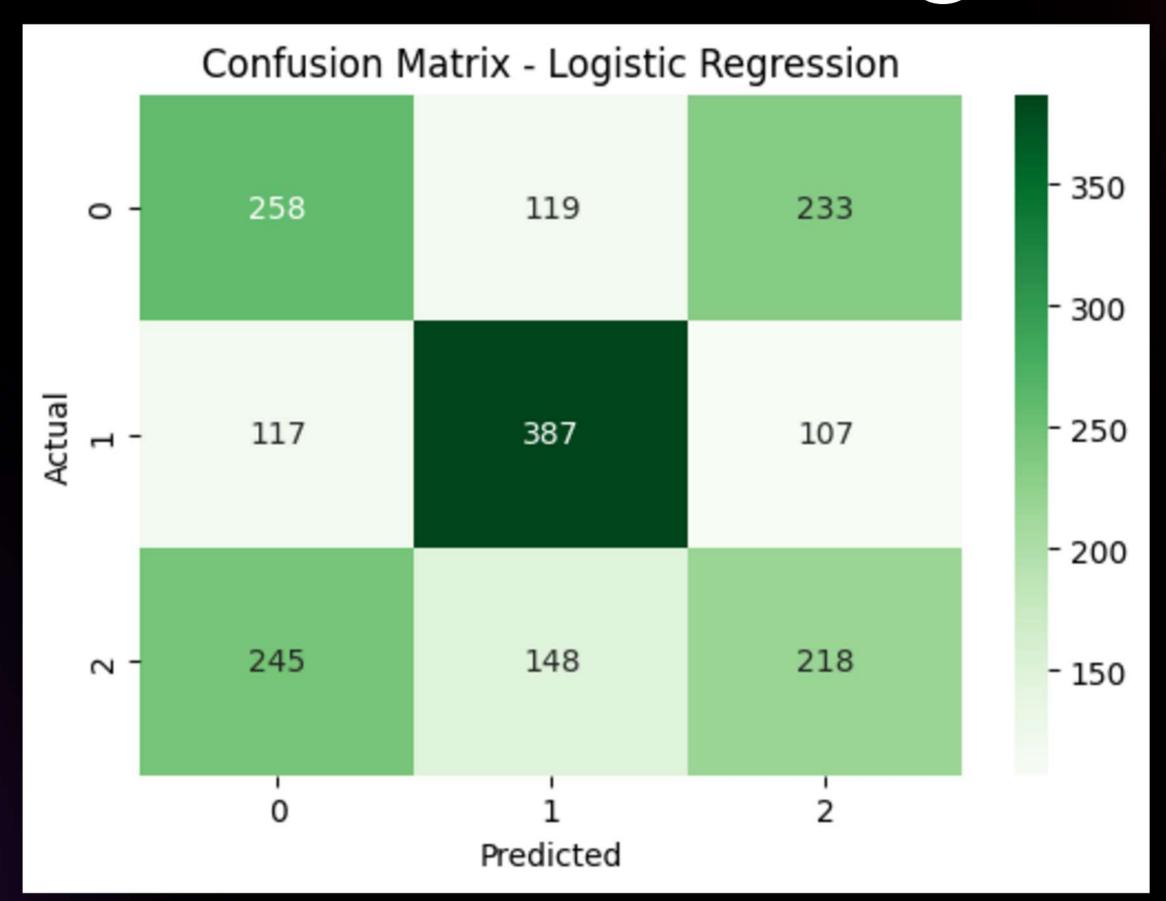
Negative sentiments

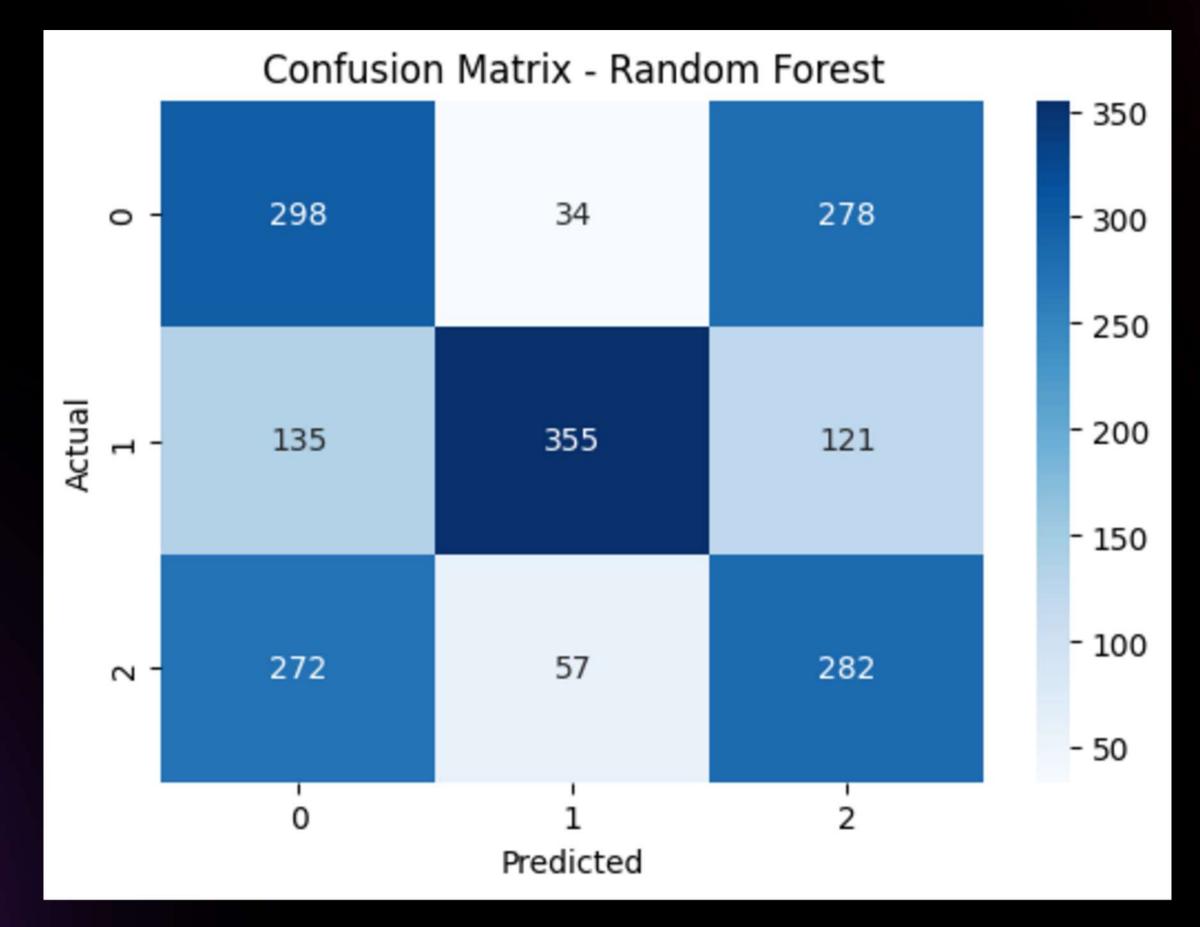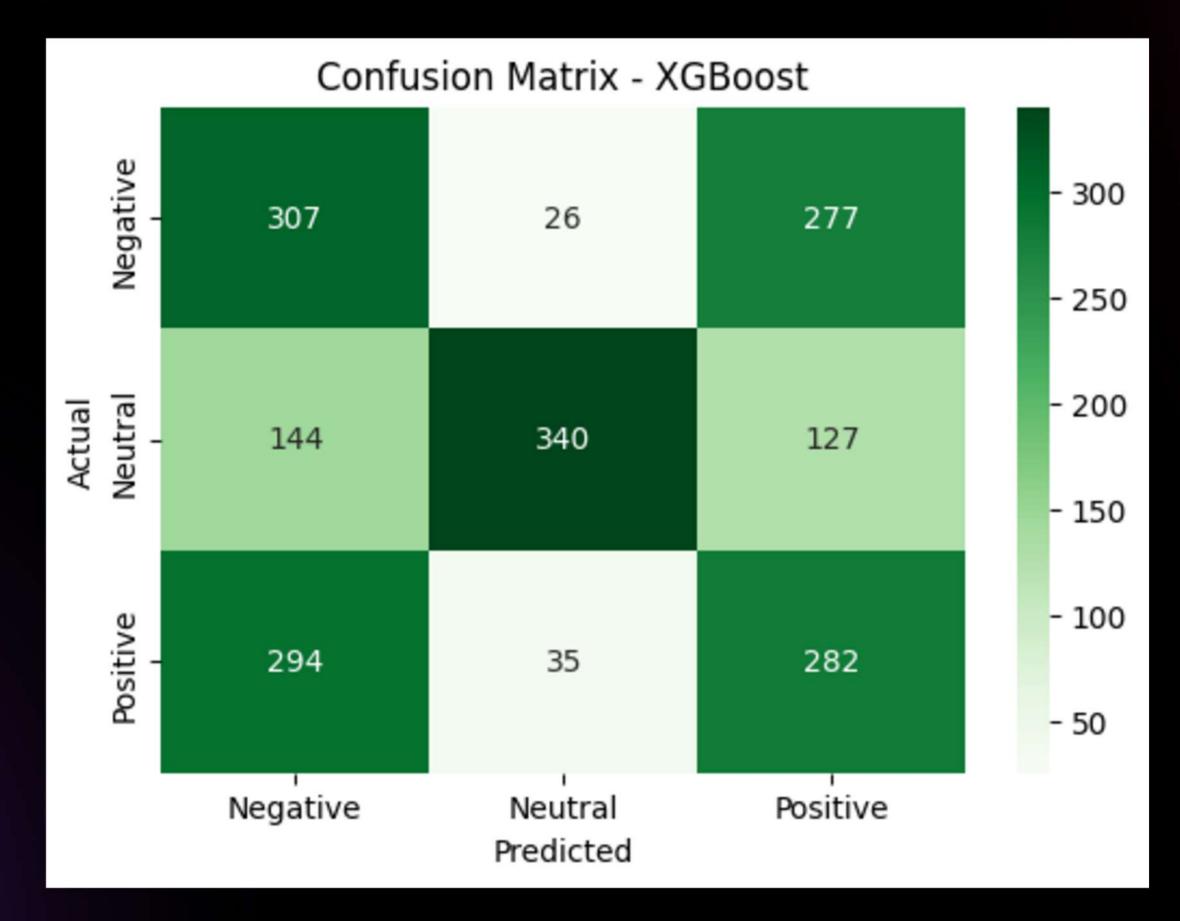# Confusion Matrix - Mnb

Confusion Matrix-Logistics

Confusion matrix -Random forest

Confusion matrix - XGboost

Thank You!