

EXPLORING USER SENTIMENTS

Analyzing 100 Million Steam Reviews

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PROJECT INTRODUCTION

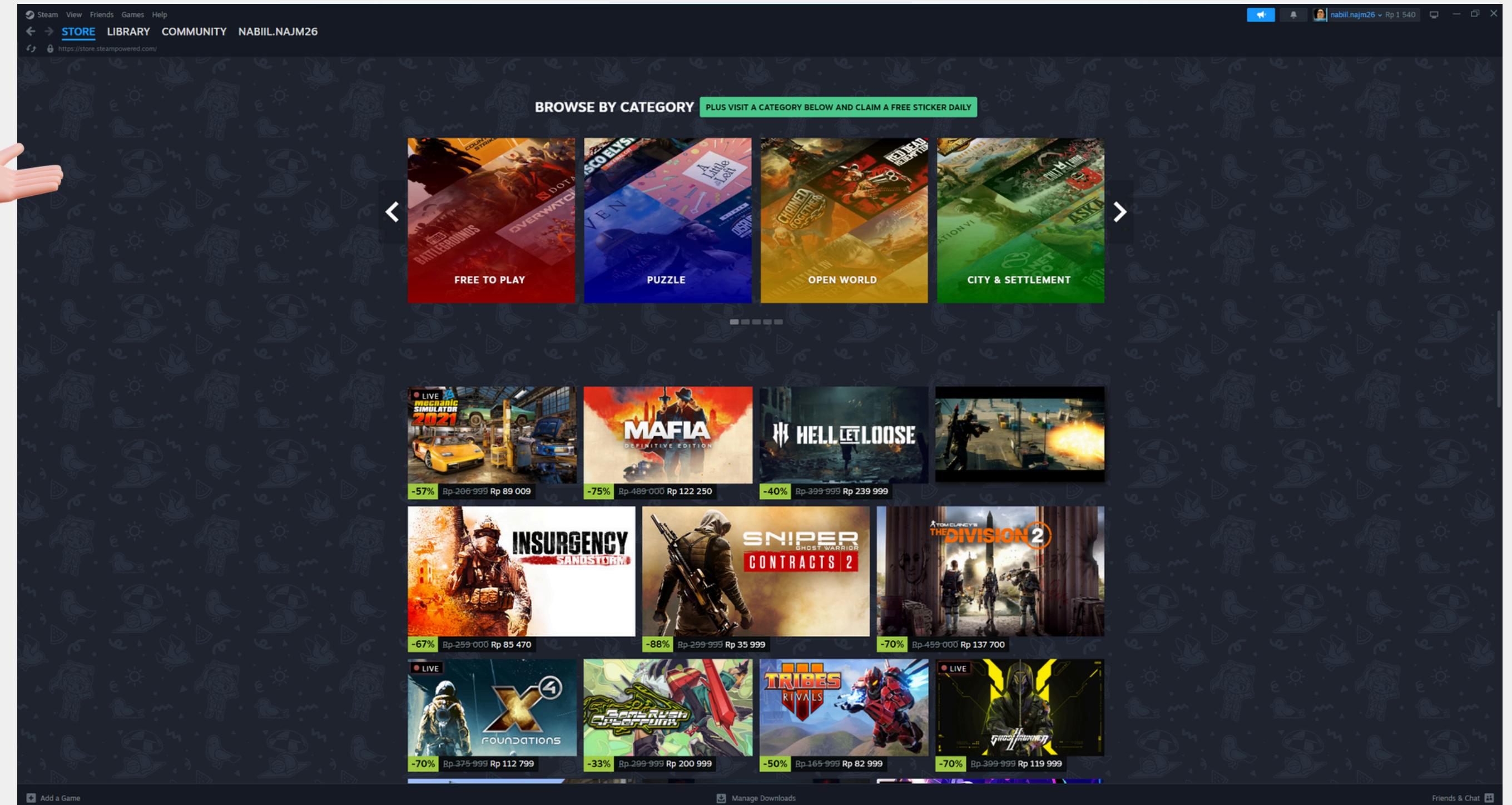
Overview:

This project aims to analyze user reviews from the Steam platform to understand the sentiment towards various games. The analysis involves extracting, processing, and analyzing large-scale review data to derive insights into user satisfaction and game popularity.

Objectives

- Conduct sentiment analysis on Steam user reviews to gauge user sentiments.
- Aggregate sentiment scores to assess the overall perception of each game.
- Visualize sentiment distribution and trends over time to identify patterns and insights.

WHY STEAM ?



The screenshot shows the Steam Storefront homepage with a dark background featuring a repeating pattern of small icons. At the top, there's a navigation bar with links for Steam, View, Friends, Games, and Help, followed by STORE, LIBRARY, COMMUNITY, and a user profile. Below the navigation is a search bar with the URL https://store.steampowered.com/. A banner at the top right encourages users to "BROWSE BY CATEGORY" and "PLUS VISIT A CATEGORY BELOW AND CLAIM A FREE STICKER DAILY". The main content area displays several categories: FREE TO PLAY (with examples like BATTLEGROUNDS, OVERWATCH, and DOTA 2), PUZZLE (with examples like SCOBELIS and LAVEN), OPEN WORLD (with examples like CHAINED TOGETHER and RED DEAD REDEMPTION 2), and CITY & SETTLEMENT (with examples like CITATION VI and PLANET ZOO). Below these are featured game cards: LIVE MECHANIC SIMULATOR 2021 (75% off), MAFIA DEFINITIVE EDITION (75% off), HELL LET LOOSE (40% off), INSURGENCY SANDSTORM (67% off), SNIPER GHOST WARRIOR CONTRACTS 2 (88% off), THE DIVISION 2 (70% off), X FOUNDATIONS (70% off), FORTNITE (33% off), TRIBES RIVALS (50% off), and GHOST HUNTER (70% off). At the bottom of the page are links for "Add a Game", "Manage Downloads", and "Friends & Chat".



STEAM

132 MILLIONS

Monthly active users in 2021

35.55 MILLIONS

Steam Peak Concurrent Users in May 2024

DETAILED REVIEWS

such as playtime (in hours), game ownership, and detailed comments on specific aspects of the game



DATASET



MASSIVE DATA VOLUME

The dataset contains over 113 million user reviews from Steam

SOURCE AND SIZE

The dataset is sourced from Kaggle and approximately 17 gigabytes in size

DETAILED DATA

The dataset includes 24 detailed columns, capturing various aspects of each review



WHY SENTIMENT ANALYSIS?

PROSPECTIVE GAME BUYERS



INFORMED PURCHASE DECISIONS

Sentiment analysis helps prospective buyers make informed decisions by highlighting the strengths and weaknesses of a game as experienced by other players. This can prevent buyer's remorse and ensure that their money is well spent.



EXPECTATION MANAGEMENT

Understanding the sentiment around a game can set realistic expectations for new buyers. If a game is highly praised for its graphics but criticized for its storyline, a buyer can decide based on what aspect they prioritize.



DISCOVERING HIDDEN GEMS

Steam reviews include various metrics such as playtime (in hours), game ownership, and detailed comments on specific aspects of the game (e.g., graphics, gameplay, story).

GAME DEVELOPERS



Product Improvement

Analyzing player sentiment provides developers with direct feedback on what aspects of the game are well-received and what areas need improvement. This can guide updates, patches, and future game development.



Marketing Strategies

Positive sentiment can be leveraged in marketing campaigns to attract new players. Conversely, understanding negative sentiment can help developers address concerns in their communications.



Competitive Analysis

By analyzing sentiment around competing games, developers can gain insights into what features or aspects are currently resonating with players, helping them to stay competitive in the market.



Player Retention and Engagement

Continuous monitoring of sentiment can help developers keep track of player engagement and satisfaction over time, leading to strategies that improve player retention.

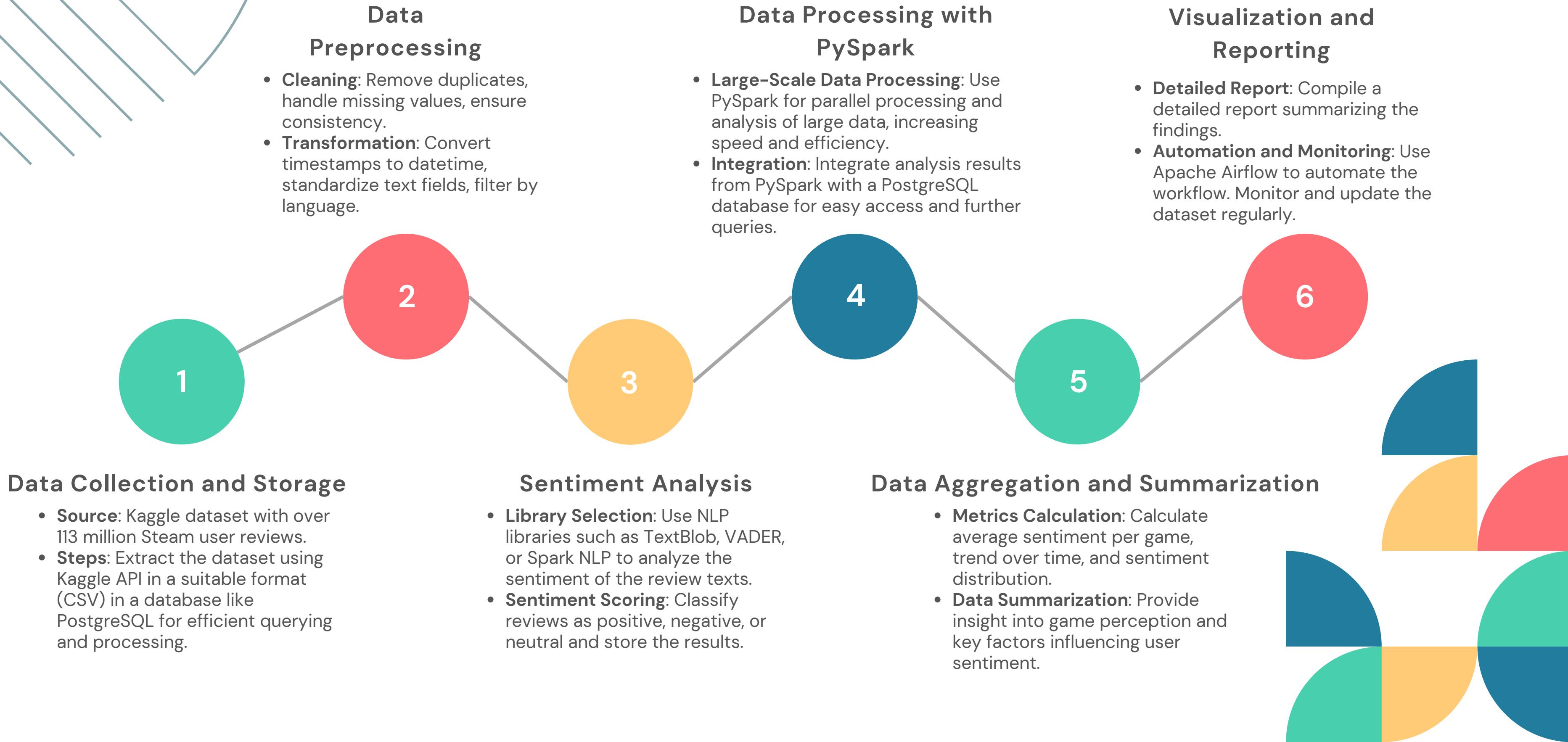


Community Engagement

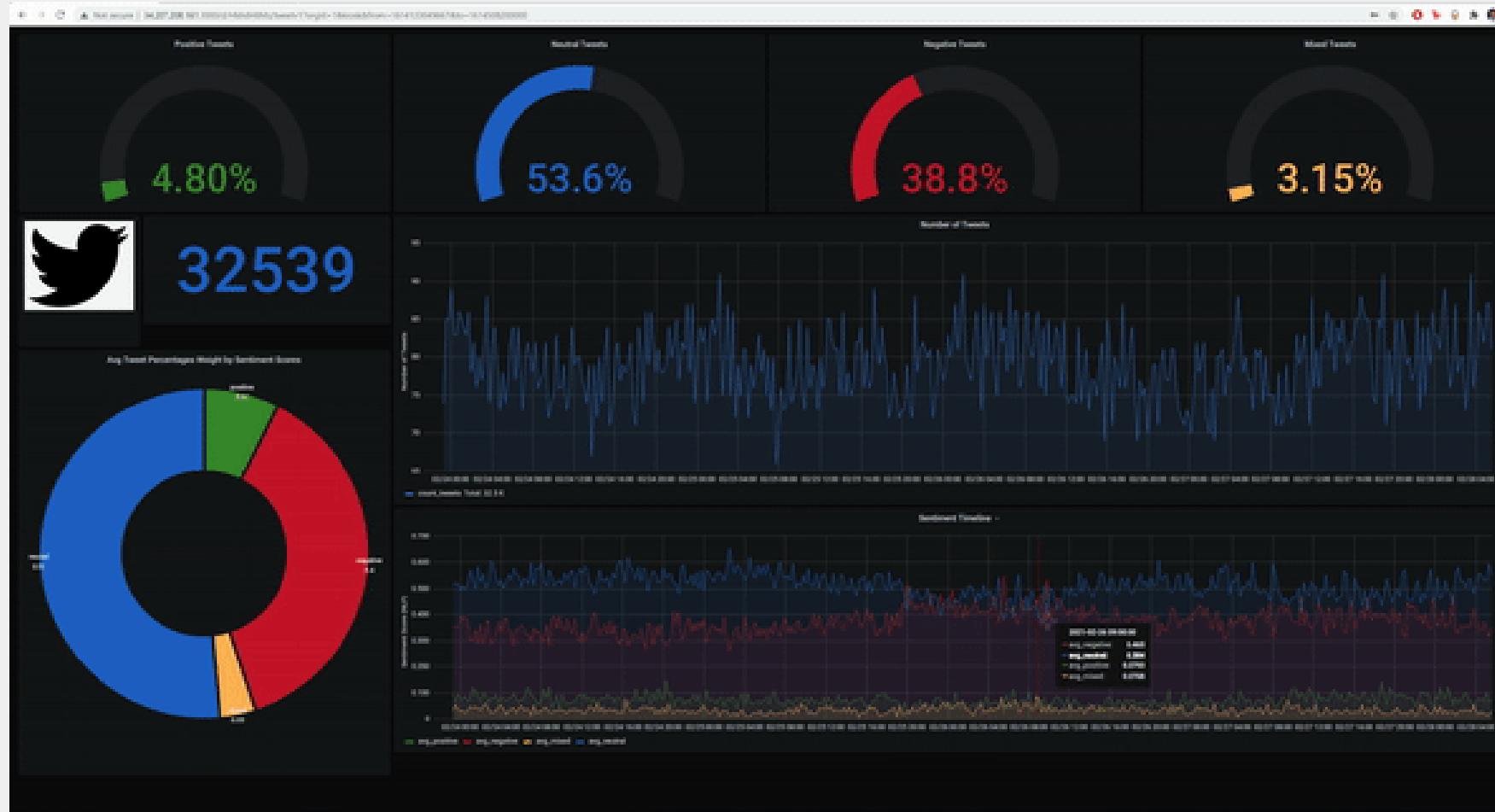
Helps understand community reactions and engagement levels. Fosters a positive community atmosphere by addressing concerns and highlighting positive feedback.



PROJECT WORKFLOW



EXPECTED OUTPUT



Dashboard example

Source: <https://github.com/hvp004/twitter-sentiment-analysis>

A detailed report on sentiment analysis per game.

The output displays the average sentiment score over specific time periods, such as daily, weekly, or monthly

The output provides the distribution of user sentiments categorized into positive, neutral, and negative

THANK YOU!