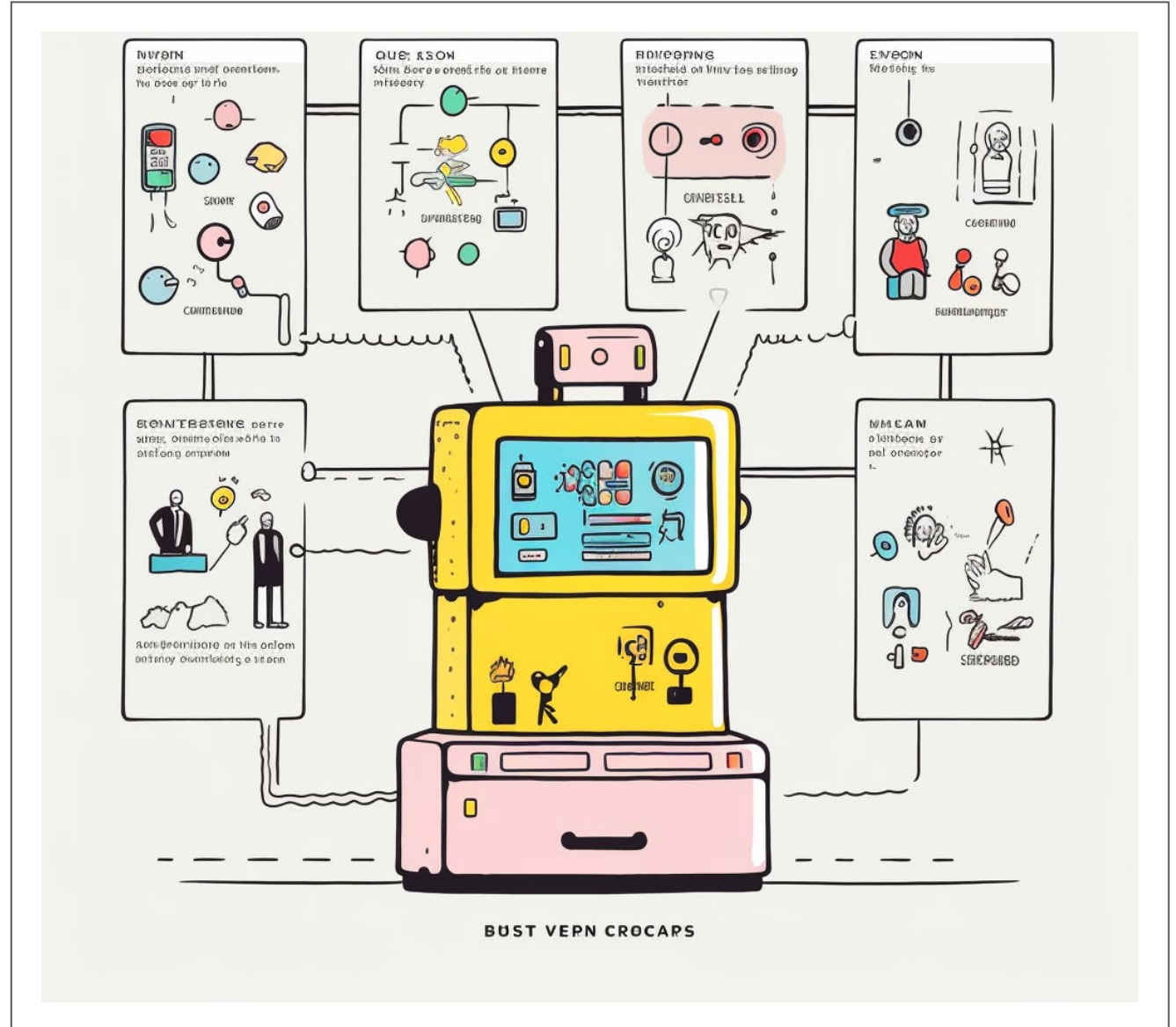


Building a Better Game Review Analyzer

A Flatiron Phase 4 Project by
Jordan Loewen-Colón



Today's Agenda



Business Problem



Goals



Data



Methods

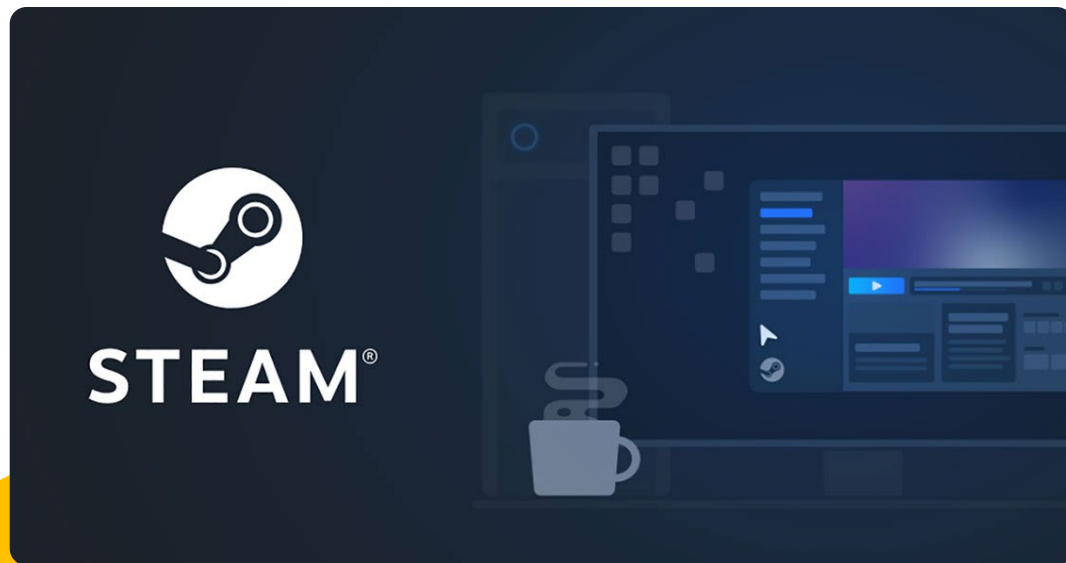


Results



The Problem

SuperGiant Games wants more useful insights from player reviews on Steam. Steam's review system offers a binary recommendation, masking nuanced player feedback. Our project will analyze reviews, focusing on aspects like sound, action, story, visuals. Through sentiment analysis, we aim to identify what elements captivate players. This understanding will guide SuperGiant Games to create more successful, player-centric games.



Primary Goals



Develop

a sentiment analysis model that extends beyond binary evaluations to understand deeper nuances within player reviews.



Aim

To shift from a mere yes/no system to a model that measures specific themes or topics of player interests.



Focus

on key game aspects, such as sound, action, story, and visuals, to understand what elements engage players and define their gaming experience.



STEAM REVIEWS

Read, Rate, and Discuss

Now it's easy to see what other Steam users think about a product before you buy. With Steam Reviews, you can browse for reviews that others have found helpful, or write your own reviews for titles you've played on Steam.

The Data

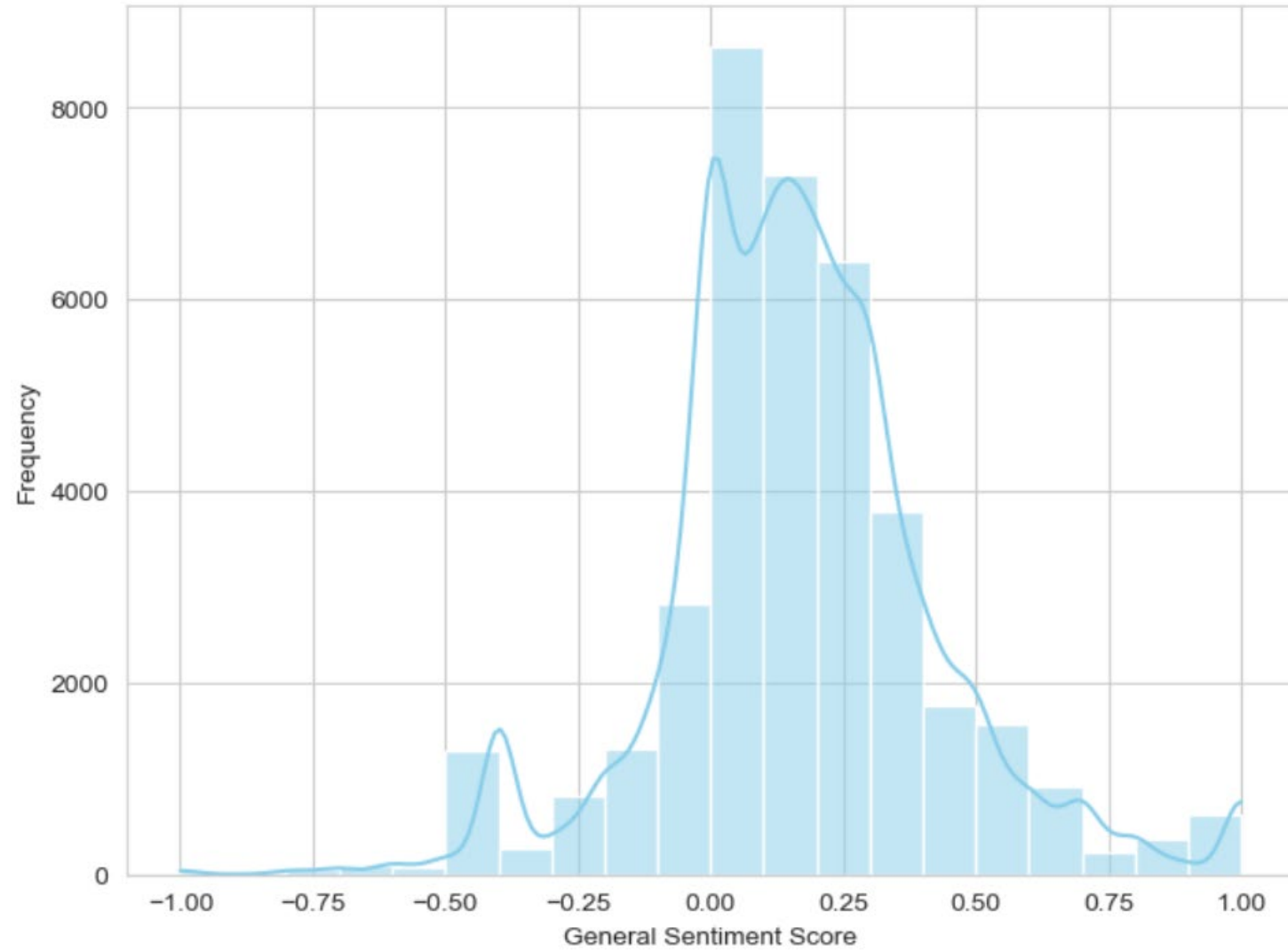
- The dataset has 70k+ entries
- The reviews follow a simple binary rating system “voted up” or not.
- Other data points include:
 - Playtime
 - Purchase data
 - Whether the review is rated as “funny” by other players



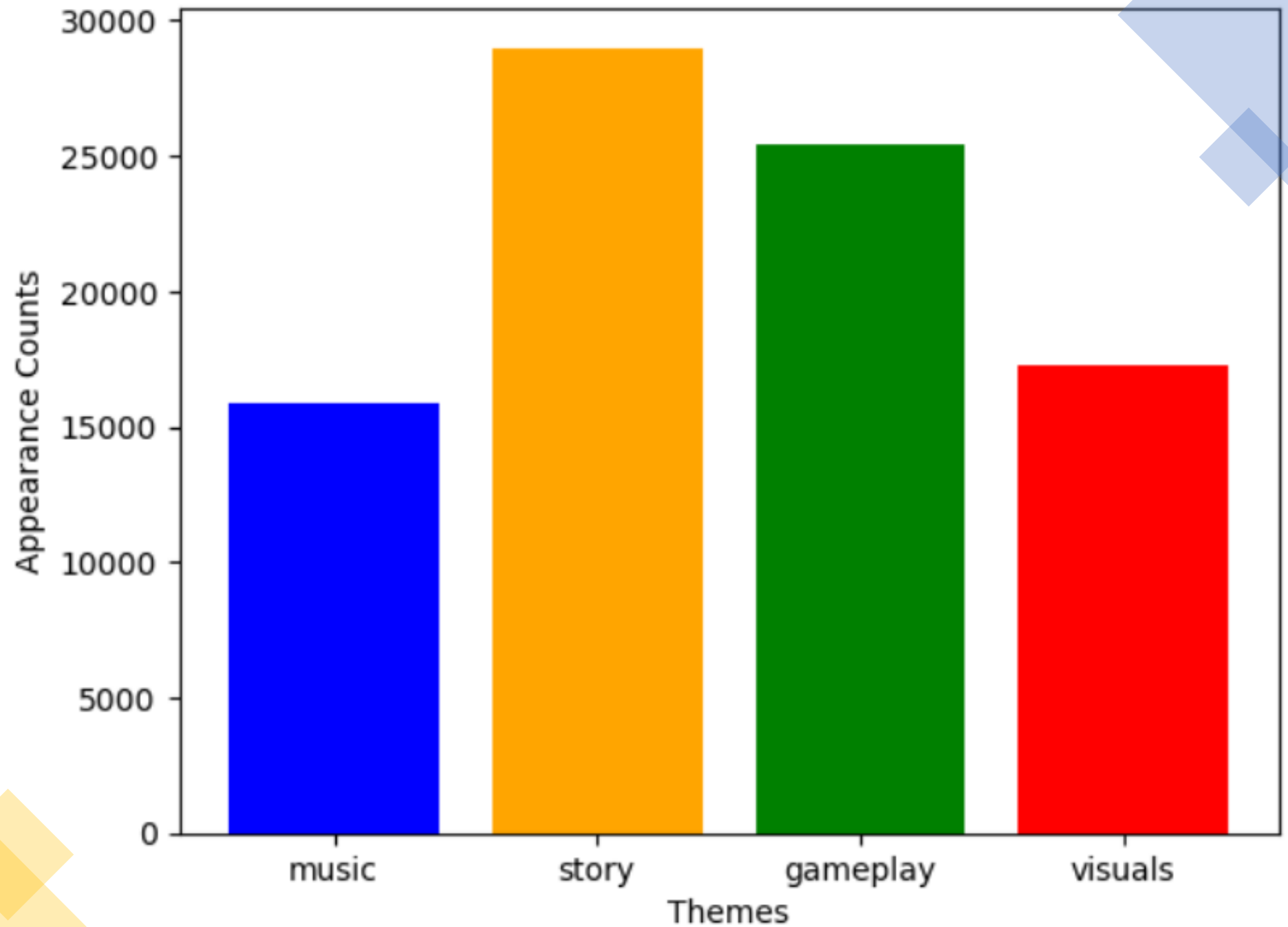
Results

**The logistic regression
had the highest precision**

Distribution of General Sentiment Scores



Theme Appearances in Reviews



TOP 5 BIGRAMS BY THEME

Music	Story	Gameplay	Visuals
Sound, track - 10	Side, quest - 9	Attack, pattern -13	Late, party - 9
Instead, audio - 12	Question, asked - 13	Power, ups - 8	Add, cart - 7
Audio, eargasm - 12	Family, drama - 11	El, combate - 9	Vibrant, color - 12
Musical, score - 12	Extended, family - 14	Power, creep - 10	Color, palette -12
Mass, effect - 10	Answer, question -14	Micro, transaction - 16	Farewell, earthly -15

Review Sentiment Analyzer



Review Length: 95



Review: go one best game time . 10/10 everything : story , gameplay , difficulty , art , voice acting .



Theme Words and Polarity

Music: voice acting, 0.548

Story: story, 0.525

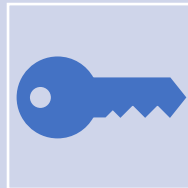
Gameplay: gameplay, 0.500

Visuals: art, 0.594

Summary



Above 90% precision rate
among all three models.

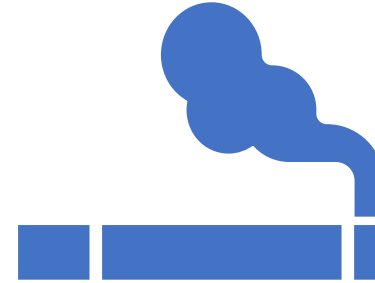


Oscore is key factor

Recommendations



#1 Incorporate the assessment of Oscore into the screening process to further refine the selection of potential participants.



#2 Target higher Oscores and individuals who have never having taken legal highs, nicotine, or amyl nitrites.

Thank You

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