🎮 GameRx: Your Digital Dose

Relief Through Play
Can video games be matched to how someone feels?

Project Overview

GameRx is a human-centered data project that explores how people use video games to cope with emotional states like stress, anxiety, frustration, emotional overload, and low energy.

Instead of focusing on popularity, ratings, or genre labels, this project looks at how players describe their emotional experiences in their own words. Using player-written Steam reviews, GameRx applies emotion analysis, behavioral modeling, and genre context to understand how different games support emotional relief.

The guiding question behind GameRx is simple:

Can games be matched to how someone feels, the way we think about comfort, release, or focus, rather than just genre or scores?

The Problem

Millions of people already use games as emotional tools, especially people who are burned out, anxious, overwhelmed, or neurodivergent. Some turn to cozy games to calm down. Others use fast-paced or challenging games to release tension.

These patterns are real, but they are rarely structured or measurable.

Most game discovery systems prioritize:

- Popularity
- Engagement
- Aggregate ratings

Meanwhile, emotional information is buried inside unstructured review text and treated as anecdotal rather than meaningful data.

GameRx addresses this gap by turning player language into structured emotional signals that can be analyzed, validated, and used for recommendation.

Why GameRx Is Different

Most gaming data projects ask:
"What performs best?"

GameRx asks:
"What actually helps people feel better?"

Key distinctions:

- Emotion is treated as distinct from sentiment
- Player language is used as behavioral data
- Emotional experience is separated from genre assumptions
- Games are mapped to *relief pathways*, not one-size-fits-all moods
- The system is designed to be explainable and human-legible

Core Framework: Emotional Relief Pathways

Rather than labeling games as "happy" or "sad," GameRx organizes emotional support into four relief pathways that describe *how* games help:

- **Comfort** – soothing, safe, calming experiences
- **Catharsis** – release, venting, channeling intense energy
- **Distraction** – shifting attention and breaking rumination
- **Validation** – feeling seen, understood, or emotionally reflected

These pathways are grounded in player review language and reinforced through clustering and correction, not assumptions.

Hybrid Modeling Approach

GameRx uses a hybrid emotional framework to ensure full coverage and interpretability.

Bottom-up signals

- Player-written reviews
- Emotion extraction using the NRC Emotion Lexicon
- Emotion intensity and richness scoring

Top-down context

- Game metadata and genres
- Game design patterns
- Psychology-informed relief mapping

Review-based emotion is always prioritized.
Genre context is used as a fallback and interpretive layer, not a driver.

This ensures:

- Every game is emotionally labeled
- Low-review or new games are still usable
- Recommendations remain explainable

What Was Built

GameRx is not a concept project. It is a fully built system.

It includes:

- A modular data pipeline for cleaning, emotion extraction, modeling, and validation
- A hybrid emotional relief model grounded in player language
- Visual analysis explaining emotional patterns and relief pathways
- A working Streamlit application that translates analysis into real recommendations

Final Outcome

GameRx culminates in a user-facing app, **GameRx | Your Digital Dose**, where people:

- Select how they're feeling
- Learn about emotional relief pathways
- Receive game recommendations based on emotional fit, not popularity

This project treats games as emotional tools, not just products.

GameRx doesn't ask what games sell best.

It asks something more human:

What kinds of games actually help people feel better, and how can we tell?