Steam Game Recommendation System

1. Introduction

With the continuous growth of the gaming industry, digital platforms like Steam have become central hubs for gamers to access, purchase, and interact with a vast library of games. However, the sheer volume of titles—spanning genres, styles, and complexity—presents a challenge for users in finding games that match their individual preferences. As a result, building an effective recommendation system for Steam games has emerged as an important solution to enhance user satisfaction and drive engagement on the platform.

1. Data and Method

Steam offers a rich dataset that includes user purchase history, gameplay duration, reviews, social interactions, and browsing behavior, all of which create a strong foundation for constructing a robust game recommendation system. In this project, I will use a dataset from Kaggle, specifically [“Game Recommendations on Steam”](https://www.kaggle.com/datasets/antonkozyriev/game-recommendations-on-steam?select=games.csv), as the primary source of data to train the model.

The first step in the process will be to clean and preprocess the data, removing irrelevant columns and focusing on essential attributes such as app\_id, is\_recommended, hours, and user\_id from the recommendation.csv file. This will streamline the dataset for the initial stages of the recommendation model. I will employ a collaborative filtering algorithm, which is effective for leveraging user interactions and preferences to recommend similar items (in this case, games) to users with comparable tastes.

Once the collaborative filtering model is trained, I plan to enhance its recommendations by integrating additional game metadata from games.csv and user preferences from users.csv. By including parameters such as game price and type, the recommendation system will be capable of tailoring recommendations to individual budget preferences and desired game genres. This multi-faceted approach will make the system adaptable to user-specific requirements, enriching the user experience by ensuring relevant, personalized game recommendations.

1. Desired Output

The goal of this project is to develop a recommendation system that accurately suggests games to users based on their previous game reviews and stated interests. The system will leverage collaborative filtering to analyze user feedback on games and recommend titles that align with their established preferences.