Project Title: What Steam Game Should I Play?

Project Proposal Description

a. Our application will aim to give users recommendations on new Steam games as well as give them analytics all steam games, giving users the ability to analyze and see trends in gaming. This would involve trends such as what type of game is popular depending on the time period, also the popularity of different game types by region. The user can put in specific games that they enjoy playing and our application can give them recommendations.
b. The user can also sort these recommendations based on price, genre as well as how similar each recommendation is to games they have previously told the application they enjoyed. The user could give feedback to the application by telling the application which recommendations the user liked and which ones the user did not like to improve the game recommendation system.
c. Our application is aiming to solve gamers' dilemma of which games to play next and which games are worth spending the time and effort to learn. By accounting for popularity, price, ratings, and genre we will be able to streamline the process for them. Our website will allow them to easily choose amongst a smaller selection of games that are personalized to their interests. By centralizing all the data in one place, the website saves the time and effort of searching for a new game. Moreover, our website makes it easier for gamers to expand their interests by categorizing games into easily distinguishable and concise tags (Ex: genre, price, age rating).

Usefulness Description

Our application will be useful to people who want to find similar video games to the ones that they already enjoy. The most similar thing to this project is actually in the Steam store itself because Steam has their own recommendation system that they use to get their users to find more games.

Our application will be different because it will be more customizable. For example, the official Steam recommender just gives you 10 or so games without any explanation, but ours will allow the user to select variables that are important to them, such as genre/cost/developers.

Realness Description

Our data set was given by the CS411 staff, and it was harvested directly from the Steam API and steamspy.com. The dataset contains data on Steam games, with columns about each game's different attributes such as genre, platform requirements, price, controller support, achievements, DLC's and many more! Each attribute has one of these datatypes: Text (string formatted in UTF-8), TextualCount (number of unique, non-empty strings), Integer (missing values are 0), Float (missing values are 0.0), and Boolean. We will be using this dataset in all of our UI pages and will continue adding reviews when a user submits a new on from the frontend.

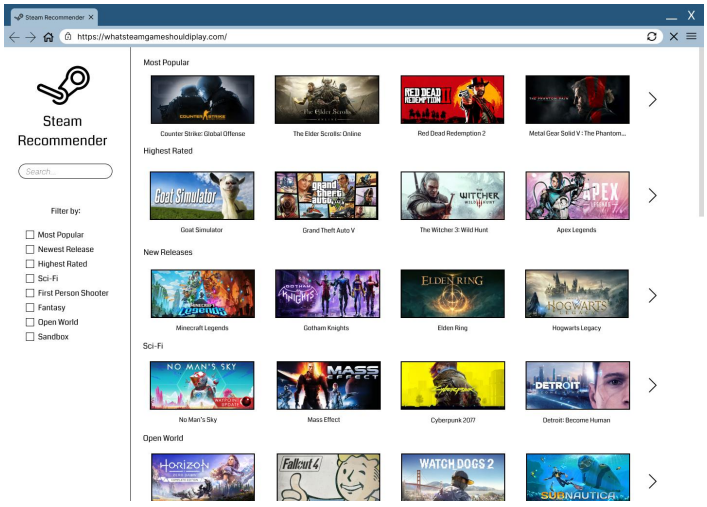
We will also create another database for user data, which will include inserting, deleting, updating, and creating new entries. This data will also include personal

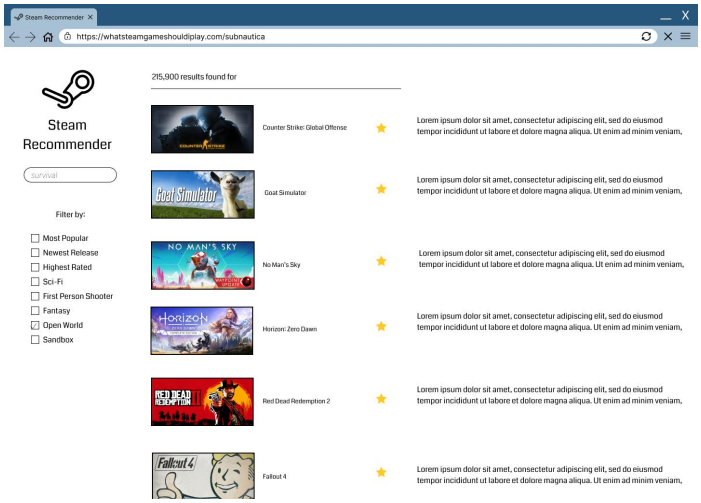
information about the user such as name, email, interests, and any other information that pertains to their game type.

Detailed Functionality

a. Recommendations for new games (creative functionality)
   The recommendation system will use the users' favorite games to deliver recommendations based on the different attributes of their favorite games. Some of these attributes include genre, game rating, price range, and whether or not other users that have played the favorite game have also played and enjoyed the game we are recommending.
b. Favorite some games
   The user will be able to favorite games via a search bar, and we will query the database to find a match such that the user's input is the starting of an existing game in the database. The user can then favorite the game and our application will update the internal database of favorited games and use that information to find other games that the user may enjoy.
c. Sort by region, price, and genre
   After we give the user recommendations, the user can sort all of the recommendations based on region, price, and genre. They will have a chance to do so when first signing up for the account but will have the option to change their preferences anytime. This is a simple thing to add because we could add an additional ORDER BY line in the SQL query.
d. Each game card: description, rating, tags representing general game groupings, reviews, etc.
   From the main page, the user can click on the game card, which will route the user to the game's details. This would include the game's description, genre, price range, and ratings and reviews. From the Steam game dataset, we will use the following attributes: required age, GenreTypes, ResponseName (for the game's name), Developer Count (lists all the developers of the games), Price attributes, RecommendationCount, OS requirement attributes, and Short and Detailed Description of the game.
e. (creative/reach goal): linking popular youtube videos in games' description pages for users to better understand the game
   When the user opens the game description page, they'll be able to view links to popular YouTube videos about the game. When users click on these links, they will be able to view the videos on the YouTube website. This can be done using possibly web scraping tools and the video game's name.

Low Fidelity UI Mockup





Work Distribution

Frontend

- **Landing page:** Michael
- **User login:** Divya
- **User-specific changes to UI**: Kaan

Backend

- **Database creation**: Jennifer
- **Connection to the frontend**: Michael
- **Querying database from backend code**: Divya