Team A

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"Should I Buy It?"
(Name subject to possible change)

Intro

Purchasing video games has become exceptionally easy and cheap, as all of the latest gaming systems have integrated online stores where users can browse and purchase game titles with the click of a button. With PC video game services such as Steam, new discounts to video games are added everyday and many users swiftly purchase these game simply if the title or appearance of the game looks appealing. There have also been cases where gamers purchase a game simply due to a price drop, or pre-purchasing games that have yet to be released because of the hype surrounding it. A new problem is that video gamers are purchasing games recklessly, and their PC video game collection quickly becomes larger than the player can ever hope to play. Combined with simple lack of free time to play every one of those games and funds that would just as quickly diminish, gamers today are running into a predicament of over-purchasing video games.

Contributions

That is why my group would like to propose a website application called "Should you buy it?". This system will be able to determine whether or not customers should purchase a game primarily based on price, current player population, and reviews. The secondary factors as to what determines if a game should be purchased is genre, status of any price changes (i.e., sales, deals, or price drops), and metacritic/professional journalist scores. Based on these factors, the system will present the user with clear, simple responses as to whether or not someone should purchase this game, with possible caveats listed.

The System

1. The website, front-end wise, will be primarily HTML, CSS, and Javascript.
2. The back-end will be developed in PHP
3. Real world data will be obtained primarily from two different APIs, the Steam API which can forward detailed information about the game itself (user population, user playtime, game specific news, global stat data for a specific game) and the SteamKit2 .net library which fetches live data of video game prices. Optionally we can use a Metacritic API as part of our algorithm if time allows and to help improve the accuracy of our algorithm.
4. Jacob Francis has stated that we would be able to host our website from his web server and as such, if we manage to set it up, would host it on Jacob's server

5. A decision making algorithm will be designed by the team to decide based on price and total user statistics (player population, steam user reviews, etc). If we find ourselves completing this phase early, we will tailor in professional review scores, user preferences in genre, the game's prevalence in social media discussions, and game completion time (simply put, some games do not end so this part would be extremely difficult).

Individual roles

Each member will have two assignments: an individual part that they can "specialize in", and an assignment that they will collaborate with the entire group on. We will work on this project in parts and while there will be multiple parts that will require all members to work and contribute, there will be smaller parts that can be developed on by a single person to decrease the workload of the group. For example, someone could specialize in learning how to use the SteamKit2 library while another could specialize in working on the Steam Web API and when the time comes those two can work together or individually to help divide up the time efficiently. Additionally, the group could divide up between backend and frontend development if necessary.

This system would fit with us as all of our schedules are chaotic due to the team being made up of college seniors and at any moment a class could pull a fast one and take someone off the team for a week. In which case, the remaining three members would be able to work on their individual assignments until such a time the fourth would be able to work with the group again.

As of right now, no specific jobs have been assigned at the moment as we would need approval of the project in order to start planning for it as it is pointless otherwise.

Group Dynamics

The group's primary method of communication is Groupme, a free to use group messaging system that is available for phones and computers. As the last two projects have shown, all members are attentive to the groupme for messages and are immediately responsive.

The team plans to use a mix of Google Drive and GitHub to program and plan our website and share any information and data that cannot be shared via Groupme.

In addition, we will be able to meet at a maximum of three days a week(not including weekends) in person such the need arise.

Links to planned APIs

Steam Web API

SteamKit2

Optional: Metacritic API