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Web App: GamerLand

Problem Description Write-up

GamerLand is a social network web application for video game enthusiasts. It allows users to discover, review, and share their favorite video games, as well as participate in discussions with other users in an online community. GamerLand will solve the problem of fragmentation in the video game community, where gamers often use multiple platforms to find information and connect with others who share similar interests. For example, gamers often use social media and community type of sites like Twitter, Discord, or others to engage in dialogue within their video game niches. They utilize Youtube and various other websites such as blogs - or actual gaming specific news outlets like IGN or GameSpot - for their video game news. Sites and methods such as these provide "*pieces* of the whole pie" so to speak, while GamerLand will provide gamers with the "whole pie". By providing a comprehensive platform for gamers, GamerLand will simplify the process of discovering new games, rating and reviewing games, and connecting with like-minded users.

Concerning its users specifically, here are different types of personas that will assist with development decisions:

Personas of GamerLand

1. Gamers who are interested in discovering new games and want to read reviews and ratings from other users before purchasing a game.
2. Gamers who want to connect with other users who share similar interests and participate in discussions about gaming.
3. Gamers who are interested in staying up-to-date on the latest news and updates in the gaming industry.

The fragmentation issue as previously mentioned will be fixed with GamerLand and poses many benefits. It will be a simple yet comprehensive platform for gamers to discover new games, read reviews, and share their opinions with others - without other non-video game "noise" to be had. It will be a community-driven platform where users can connect with other gamers who share similar interests and participate in discussions about gaming. Latest news

and updates in the gaming industry, including awards shows, game events/festivals, and upcoming game releases will provide a focused stream of content specific to their personalized and customized filters and interests. The benefits truly justify the cost of building the web application as they provide a valuable service to the gaming community and create an all encompassing video game niche platform for users. Regarding interaction specifics, users will do this in various ways, such as: browsing and searching games by title, developer, system/console, characters, or genre. Publicly or privately rating and reviewing games. Creating lists, following other users, joining groups, and receiving personalized recommendations. All interactions will cultivate a social experience that is personalized. News feeds and blog segments will inform and help users stay up-to-date with news, events, and upcoming game releases.

The Minimum Viable Product (MVP)

As for the Minimum Viable Product of GamerLand, I have identified two core categories, Explore and Connect. Within each core element of GamerLand are different features that will bring this vision to existence. Three of which are considered the MVP's and will form a workable solution for users. The MVP's are the "Game Search", "Ratings & Reviews", and the "User Profiles" features. The rest will form the backlog. I have divided and briefly organized them into the two core categories. Explore

a. Game Search (MVP 1)
b. My Ratings & Reviews (MVP 2a)
c. Community Ratings & Reviews (MVP 2b)
d. News (backlog)

2. Connect
    a. User Profiles (MVP 3)
    b. Messaging (backlog)
    c. Discussions (backlog)
    d. User Search (backlog)

Game Search (MVP 1)

The Game Search feature is essential to solving the issue of fragmentation in the video game industry by providing a unified platform for users to search and discover games across different consoles and publishers. By allowing users to filter and sort games by various criteria, such as title, characters, genre, gaming console, and even user ratings, Game Search reduces the need for users to navigate multiple websites or platforms to find the games they want to play. This helps streamline the user experience and saves users time and effort in their game search. The data that needs to be managed includes information about the games users seek out on the platform. This information will include the game title, description, release date, genre, ESRB rating, gaming console availability, developer, publisher, and even game images and

summaries. The data would need to be organized into a persistent object that would allow users to search for games based on any of these fields. The relationship between these objects would be one-to-many, with each game having a unique identifier.

My Ratings & Reviews (MVP 2a) and Community Ratings & Reviews (MVP 2b)

The My Ratings & Reviews and Community Ratings & Reviews features of GamerLand are important for users to share their experiences and opinions about games with others, as it helps to achieve and build a sense of community and trust among its users. Ratings & Reviews coupled with the Game Search feature further solves the problem of fragmentation and I will note that the more ratings and reviews shared within the GamerLand platform, the stronger and more powerful the Game Search feature becomes. The My Ratings & Reviews allow users to save and access their own ratings and reviews, while Community Ratings & Reviews provide access to those particular ratings and reviews from other users. Personalization and preferences will be available for users and will allow users to privatize certain lists, ratings, and reviews, or make them public to the GamerLand community of users. By providing a feedback mechanism for users, these features help users make informed decisions about which games and increase user engagement on the platform.

Specifically regarding the *user* ratings and reviews feature, the data that needs to be managed will include information about the user's rating and review of a particular game. This information would include the username of said user, the game's title, the user's rating (either star rating of 1-5 or rating out of 1-10 scale), and the user's review (limited to a character or word count). Similar to the Game Search data, this data would need to be organized into a persistent object that would allow users to view and edit their own ratings and reviews. The relationship between these objects would be one-to-many, with each user having multiple reviews for different games.

Now, as for the *community* ratings and reviews feature, this data that would need to be managed is all information about the ratings and reviews of *all users* for a particular game. This information would include the user's user/profile name, the game's title, that particular user's rating, and their respective review. The data would need to be organized into a persistent object as well. Allowing users to view and sort the ratings and reviews by various criteria. The relationship between these objects would be one-to-many, with the ability to allow each game to have multiple reviews from different users.

User Profiles (MVP 3)

User Profiles are rather crucial for providing a personalized experience for GamerLand's users and also adding to that previously mentioned sense of community on the platform. By allowing users to create and customize their profiles, including their gaming preferences and reviews, the User Profiles feature enable users to connect with others who have similar interests and discover new games based on recommendations from their peers. User Profiles also allow for the implementation of features such as messaging and discussions, which can further enhance the community aspect of the platform. The User Profiles feature is essentially the key

to the “Connect” aspect of GamerLand, while significantly enhancing the “Explore” feature as well.

For this feature, User Profiles require information regarding account data and activity data to be managed. This information would include of course the user's GamerLand username (created by the user), and a required email address, and password. A profile picture, bio, and activity history (games played, ratings and reviews, discussions participated in, etc.) will be managed as well. This data will also be made and organized as a persistent object that would allow users to view and edit their own profile information. However, the relationship between these objects would be one-to-one, *with each user having a unique identifier*.

A High-Level View of Architecture

Now, in order to put this all together - and to give a high-level idea of architecture that is involved for GamerLand - the front-end will consist of React for the UI, an Express.js server for the API (utilizing this with Node.js), and a MongoDB database for data storage. The MongoDB database would need to contain and manage user accounts, game information including metadata, ratings, reviews, and news articles. The user flow would start with the user creating an account, which would allow them access to rate and review games. Game Search is available to anyone but creating an account will allow access to Users can browse games and see personalized recommendations, as well as follow other users and see their activity. They can also browse basic game industry news.