**DATA MODELING FOR INFORMATION PROFESSIONALS – INFO 5707**

**GROUP MEMBERS: GROUP 12**

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**PROJECT PROPOSAL**

Our team consists of at four individuals, each of whom has a different project proposal are:

**Gayathri Katukojwala:**

Stock Price Tracking

**Uma Abhishek:**

Polakonda: Gaming Leaderboard Database

**Sashi Kiran Maddineni:**

Soccer Transfer Market Database

**Vijay Raj Pathani:**

Revolutionizing Auto Insurance: Smart and Safer Driving with Telematics

From the four topics mentioned above, we have decided to select the **"Gaming Leaderboard Database"** project because we find it to be particularly interesting and are eager to work on it.

**TITTLE: GAMEING LEADERBOARD DATABASE**

**INTRODUCTION**

Games are now present everywhere. Games have evolved so quickly in recent years. When we look back over the years, we can see that the games have had an intriguing journey with players who have been increasing, changing player preferences, and expanding the industry. From text-based multiplayer games to graphical MMORPGS, free-to-play games, and mobile games, the multiplayer gaming industry has evolved to accommodate both changing player preferences and technology improvements.

Here we'll create a gaming leaderboard, which will provide access to a thrilling world of rivalry, interaction, and self-improvement. It doesn't matter if you are an esports enthusiast or a casual gamer. Next, we'll examine the benefits that real gaming leaderboards can provide for users. And it's not just about keeping score; it's also about the players' feels as they engage in the activities.

**OBJECTIVES**

Display of player ranking and tracking the performance of the player is the main of the Gaming Leaderboard system.

Few of the following are:

* **Game Discovery and Variety:**

Targets to make it easier for consumers to find new games, games with more challenges, games that are relaxing, and games that are distinct.

* **Data Analytics and Player insights:**

gathering and analyzing your gaming information to determine your style of play, your strengths, and your preferences. This aids in both your gaming improvement and the creation of fun games.

* **Fostering Gaming Communities:**

Fostering a feeling of community among gamers, enabling them to connect with other enthusiasts who share a similar passion for particular games and genres.

* **Acknowledging and Inspiring Gamers:**

Celebrating gamers' gaming prowess and accomplishments and encouraging them to improve their performance in their favorite games through this recognition.

**SCOPE**

This gaming leaderboard can be used in gaming industry and users like 1.Game developers: in order to enhance game design and user experience, they might utilize it to track player accomplishments and performance data for their games 2.Gaming Companies: this database can be used by online gaming firms to maintain leaderboards and increase user engagement 3.Individual Gamers: For individual gamers to keep track of their progress and compare their accomplishments with peers, some databases may be created.

* **Player Management:**

creating a profile, logging in, and managing it while protecting the security and privacy of the data.

* **Game Management:**

Information about games, such as names, release dates, descriptions, genres, and creators, are stored in a database called game management.

* **Leaderboard Management:**

Support for several leaderboards, each with its own names, descriptions, and time constraints, is known as leaderboard management.

* **Score Tracking:**

Score tracking is the process of gathering and keeping track of player scores, together with a timestamp, on different leaderboards.

* **Viewing Leaderboards:**

To encourage competitiveness and participation, a user-friendly interface for participants to browse, sort, and filter leaderboards is implemented.

* **Security Measures:**

Strong security measures should be put in place to safeguard player information, discourage cheating, and preserve the integrity of the leaderboards.

* **Security and Fraud Prevention:**

Implementing measures to ensure the security of user data.

Monitoring for fraudulent activities and taking preventive actions

**USER REQUIREMENTS**

* **Historical Data tracking:**

Users should be able to access the historical data of the Games such as User ratings, Pricing, research, and trend analysis.

* **Field-Level Security:**

To manage access to sensitive data and protect data privacy, users must be able to define fine-grained security permissions at both the table and field levels.

* **Multiple User access:**

Multiple users should be able to access and use the dataset at once through the system, encouraging teamwork, research, and data analysis.

* **Data Modification Privileges:**

Certain Users require special permissions to update the Data or insert or delete the Data, such users are mostly Admins for the system. Restricting these privileges increases the data integrity.

* **User Management and Access control:**

Admin users should have the ability to manage user accounts, assign roles, and control access levels to ensure proper data security and privacy.

Here we were using **MySQL** and **Python** to develop this project.