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SWDV 691
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Redesign DB

Technology:

For my database I am going to be using a relational database. The reason I chose to go with a relational DB approach is primarily because I will hopefully have large volumes of changing data at the applications peak. The changing data would consist of high scores across multiple games changing and interchanging positions. Another reason for the relational DB is the normalized data between users, scores, and games. Each User will have a display name that will connect their high score to the appropriate game and rankings table to update and display user rankings. Display names will also be used to connect friends via each user's friend table.

Tables:

Display Name	2nd	char
First Name		char
Last Name		char
Email	1st	char
Password		char

Account Table

Display Name	1st	char
Highest Score		int
Current Score		int
Title	2nd	char

Game Score Table

Display Name	1st	char
Status		bool
Friend Name		char

Friends Table

Title	1st	char
Company		char
Copyright		date

Game Table

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Relationships:

Accounts table - has a one-to-many relationship. The relationship is one to many as the Display name secondary key connects every game table for high scores as well as the friends table together.

Game Score Table – each game table has a one to one relationship with the Account table through the Display Name key.

Friends Table – One to one relationship to the accounts table.

Game Table – The game table will be a one to one relationship used to identify which title will receive the score in the game score table.

Usage:

Within the application the database itself will be simple. It will contain a table to hold all account information. The information will consist of name first and last as well as email in order to perform account recovery via email. The account table will also keep track of each logged in users display name. The display name itself will be the secondary key to connect users to the appropriate game score table. Each game will have its own game score table. Each game score table will hold the highest score the user has as well as their current or last attempted score. Once the current score becomes greater than their highest score the highest score will be overwritten. Doing so will ensure users can keep track of personal bests for specific games. Each game score table will use the title from the game table to identify which game score table receives the scores. Each display name will also connect each user to their perspective friends table. The friends table will hold friends display names as well as their logged in

status. The purpose of the friends list is to help players keep connected with rivals and friends or family that maybe want to compete score wise with each other.