CPSC 304 Project Cover Page

Milesto	ne #: <u>4</u> _		
Date:	Jun 22, 20	023	
Group N	lumher:	9	

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia.

Project Description

This application allows users to navigate and edit data related to players of Valorant, a tactical first-person shooter game, and their related information — things like what skins they own, what matches and gamemodes they have played, what maps they have played on, what agents they have played as, etc. The database models skins, weapons, matches, teams, game modes, maps, agents, and abilities, as well as the relationships between these entities. Using the application, users can input and track information related to their account, and make conclusions, like whether they have more skins than average compared to other players, etc.

GitHub Link: https://github.students.cs.ubc.ca/CPSC304-2023S-71/project-d2l90-m0z6r-r2o2n

Project Schema

Entities

Player

(username: CHAR (20), rank: CHAR (20), acct_level: INTEGER)

Team

(team_name: CHAR (20), numOfMembers: INTEGER)

Skin

(skin name: CHAR (20), price: INTEGER)

Gun

(gun name: CHAR (20), c cost: INTEGER, type: CHAR (20))

Match

(ID: INTEGER, score: CHAR(5), duration: INTEGER, gamemode_name: CHAR(20),

map_name: CHAR(20))

GameMode

(gamemode name: CHAR(20), numOfPlayers: INTEGER)

Map

(map_name: CHAR(20), numOfSites: INTEGER)

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Agent

(agent name: CHAR (20), role: CHAR (20))

Ability

(ability name: CHAR (20), agent_name: CHAR (20))

Passive

(ability_name: CHAR (20), agent_name: CHAR (20))

Active

(ability_name: CHAR (20), agent_name: CHAR (20), c_cost: INTEGER)

Relationships

Owns

(username: CHAR (20), skin_name: CHAR (20))

For

(skin name: CHAR (20), gun name: CHAR (20))

Plays

(username: CHAR (20), ID: INTEGER, agent_name: CHAR (20))

IsOn

(username: CHAR(20) NOT NULL, team_name: CHAR(20))

(assertions are used for implementing total participation constraint)

Has – see Ability table

On, Is Type – see Match table

Duration (an attribute of Match) was formerly part of Gamemode – this was made an attribute of Match instead, as we found it hard to define it as part of Gamemode.

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Query Results

GUI showing pre-loaded data (i.e. what exists in the database on startup.) on the next page.

```
Players:
namorachërae (Siver_II, 254), mangoërango (Platinum_I, 356), blueberryëxiao (Silver_II, 280), strawberry#3864 (Gold_III, 86), spaghetti#6969 (Iron_III, 45), spaghetti#6969 (Iron_III, 45), fruittar#1111 (Silver_II, 45), cake#1111 (Silver_II, 45), creampuiff#1111 (Silver_III, 45), cake#1111 (Silver_III
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Guns:
Vandal (Rifle, 2900), Phantom (Rifle, 2900), Guardian (Rifle, 2250), Spectre (SMG, 1600), Stinger (SMG, 1100), Frenzy (Pistol, 450), Sheriff (Pistol, 800), Classic (Pistol, 0), Bucky (Shotgun, 850), Judge (Shotgun, 1850),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    isOn:
blueberry≒xiao : Fruits , cake#1111 : Sweets , creampuff#1111 : Sweets , fruitart#1111 : Sweets , mango≒tango : Fruits , namoraeli#rae : Team Name Pending , spaghetti#6969 : Team Name Pending , strawberry#3864 : Fruits
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   plays:
blueberry#xiao (Gekko , 12973), blueberry#xiao (Gekko , 12975), blueberry#xiao (Phoenix , 12974), namoraeh#rae (Breach , 12973),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches: 12973(13-06, Unrated, Bind, 45), 12974(10-13, Competitive, Haven, 60), 12975(22-40, Deathmatch, Ascent, 10),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Teans: Fruits (Member count: 3 ), Team Name Pending (Member count: 2 ), Sweets (Member count: 3 ),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     owns:
blueberry#xiao : Smite , namoraeh#rae : Prime , strawberry#3864 : Prime ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     for:
Prime : Frenzy , Prime : Vandal , Smite : Spectre .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gamemodes:
Unrated , Competitive , Deathmatch ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Abilities:
Buddy Orb , Flashpoint , Hot Hands ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Agents:
Phoenix, Breach, Gekko,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Actives:
Flashpoint, Hot Hands,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Maps:
Haven, Ascent, Bind,
Created Tables.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Passives:
Buddy Orb,
                                                                                                                                                                                                 Added Data
```

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INSERT Query – Player
Insert New
Select an entity to insert: Player ▼
Insert a Player
Player: grapefruit#001
Rank: Diamond_II
Level: 297
Insert
Return to Home
GUI shows:
Insert New
Select an entity to insert: Player •
Insert a Player
Player:
Rank: Level:
Insert
Deturs to Home

(Again, some entries have been cut out to ensure that this screenshot is legible.)

Added new player. Current players in database: namoraeh#rae (Silver_II , 254), mango#tango (Platinum_I , 356), blueberry#xiao (Silver_II , 280), strawberry#3864 (Gold_III , 86), spaghetti#6969 (Iron_III , 45), creampufft#1111 (Silver_II , 45), grapefruit#001 (Diamond_II , 297),

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INSERT QUERY – Team

Insert New

Insert New
Select an entity to insert: Team 🔻
Insert a Team
Team Name: Team 1
Number of Players: 1
Player Names:
grapefruit#001
Insert
GUI shows:
Insert New
Select an entity to insert: Player ▼
Insert a Player
Player:
Rank:
Level:
Insert
Return to Home

Added new team. Current teams in database: Fruits (Member count: 3), Team Name Pending (Member count: 2), Sweets (Member count: 3), Team 1 (Member count: 1),

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Return to Home

INSERT Query – Match
Insert New
Select an entity to insert: Match v
Insert a Match
Match ID: 29831
Match Score: 13-02
GameMode: Unrated
Map: Ascent
Duration: 35
Insert
GUI shows:
Insert New Select an entity to insert: Player >
Insert a Player
Player:
Rank:
Level: Insert

Added new match. Current matches in database: 12973 (13-6, Unrated, Bind, 45), 12974 (10-13, Competitive, Haven, 60), 12975 (22-40, Deathmatch, Ascent, 10), 29831 (13-02, Unrated, Ascent, 35),

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GUI showing database contents after all three insert queries:

```
namoraeh#rae (Silver_II, 254), mango#tango (Platinum_I, 356), blueberry#xiao (Silver_II, 280), strawberry#3864 (Gold_III, 86), spaghetti#6969 (Iron_III, 45)
grapefruit#001 (Diamond_II, 297),
Fruits (Member count: 3), Team Name Pending (Member count: 2), Sweets (Member count: 3), Team 1 (Member count: 1),
blueberry#xiao: Fruits, cake#1111: Sweets, creampufft#1111: Sweets, fruittart#1111: Sweets, grapefruit#001: Team 1, mango#tango: Fruits, namoraeh#rae
Maps:
Haven, Ascent, Bind,
Gamemodes:
Unrated, Competitive, Deathmatch,
12973(13-6, Unrated), 12974(10-13, Competitive), 12975(22-40, Deathmatch), 29831(13-02, Unrated),
Vandal, Spectre, Frenzy,
Skins:
Silvanus, Prime, Smite,
blueberry#xiao: Smite, namoraeh#rae: Prime, strawberry#3864: Prime,
Prime: Frenzy, Prime: Vandal, Smite: Spectre,
Agents:
Phoenix, Breach, Gekko,
Abilities:
Buddy Orb , Flashpoint , Hot Hands ,
Flashpoint, Hot Hands,
Passives:
Buddy Orb,
blueberry#xiao (Gekko, 12973), blueberry#xiao (Phoenix, 12974), namoraeh#rae (Breach, 12973),
```

Note that isOn has also changed due to the insert query for team. Once again, some entries have been left out to ensure that this screenshot is legible.

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UPDATE	Query	– Pla	ver
---------------	-------	-------	-----

Update New
Select an entity to update: Player 🕶
Update a Player
Old Username: namoraeh#rae
New Username: banana#001
New Rank: Diamond_III
New Account Level: 300
Update
Update New Select an entity to update: Player Update a Player
Old Username:
New Username:
New Rank:
New Account Level:
Update
Return to Home

Updated Player: namoraeh#rae to: banana#001,

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UPDATE	Query	√ – Te	am
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OPDATE Query – Team
Update New
Select an entity to update: Team 🔻
Update Team
Old Team Name: Team Name Pending
New Team Name: Team Name Determined
Number of Members: 2
Player Names: (if you want a player to stay on this team, you must include them in one of the fields below.) banana#001 spaghetti#6969 Update GUI shows: Update New Select an entity to update: Player Update a Player Old Username: New Username: New Rank:
New Account Level:
Update

Return to Home

Players have been updated: banana#001 , spaghetti#6969 ,

 $Team\ Team\ Name\ Pending\ has\ been\ updated\ to:\ Team\ Name\ Determined (Member\ count:\ 2\),$

Update New
Select an entity to update: Match 🕶
Update Match
Old Match ID: 12973
New Match ID: 12970
Match Score: 13-02
GameMode: Competitive
Map Name: Haven
Duration: 35
Update
GUI shows: Update New Select an entity to update: Player >
Update a Player
Old Username:
New Username:
New Rank:
New Account Level:
New Account Level:

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GUI showing database contents after running all three queries:

```
Players:
banana#001 (Diamond_III, 300), mango#tango (Platinum_I, 356), blueberry#xiao (Silver_II, 280), strawb
Teams:
Fruits (Member count: 3), Team Name Determined (Member count: 2), Sweets (Member count: 3),
banana#001 : Team Name Determined, blueberry#xiao : Fruits , cake#1111 : Sweets , creampufft#1111 : Sw
Maps:
Haven, Ascent, Bind,
Gamemodes:
Unrated, Competitive, Deathmatch,
Matches:
12970(13-02, Competitive), 12974(10-13, Competitive), 12975(22-40, Deathmatch),
Vandal, Phantom, Guardian, Spectre, Stinger, Frenzy, Sheriff, Classic, Bucky, Judge,
Skins:
Silvanus, Prime, Smite,
owns:
banana#001 : Prime, blueberry#xiao : Smite, strawberry#3864 : Prime,
Prime: Frenzy, Prime: Vandal, Smite: Spectre,
Agents:
Phoenix, Breach, Gekko,
Abilities:
Buddy Orb, Flashpoint, Hot Hands,
Actives:
Flashpoint, Hot Hands,
Passives:
Buddy Orb,
plays:
banana#001 (Breach, 12970), blueberry#xiao (Gekko, 12970), blueberry#xiao (Phoenix, 12974),
```

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Select Query – Example with Player

Search Existing

Select from: Player 🔻
where:
username:
rank: Silver_II
level:
Search

GUI shows:

Return to Home

Your search result: rank, namoraeh#rae (Silver_II, 254) blueberry#xiao (Silver_II, 280) fruittart#1111 (Silver_II, 45) cake#1111 (Silver_II, 45) creampufft#1111 (Silver_II, 45)

Current players in database: namoraeh#rae (Silver_II , 254) mango#tango (Platinum_I , 356) blueberry#xiao (Silver_II , 280) strawberry#3864 (Gold_III , 86) spaghetti#6969 (Iron_III , 45) spaghett#6969 (Iron_III , 45) fruittart#1111 (Silver_II , 45) cake#1111 (Silver_II , 45) creampufft#1111 (Silver_II , 45)

Project Query – Example with Player
Project:
From: Player •
Select attributes:
username
Submit
GUI shows:
Return to Home
PROJECT result: SELECT username FROM player [blueberry#xiao,,,,], [cake#1111,,,,], [creampufft#1111,,,,], [fruittart#1111,,,,], [mango#tango,,,,], [namoraeh#rae,,,,], [spaghett#6969,,,,], [spaghetti#6969,,,,], [strawberry#3864,,,,],

With more than one attribute:
Project:
From: Player V
Select attributes:
username
rank
Submit
GUI shows:

```
PROJECT result:
SELECT username, rank FROM player
[namoraeh#rae, Silver_II,,,],
[mango#tango, Platinum_I,,,],
[blueberry#xiao, Silver_II,,,],
[strawberry#3864, Gold_III,,,],
[spaghetti#6969, Iron_III,,,],
[spaghett#6969, Iron_III,,,],
[fruittart#1111, Silver_II,,,],
[cake#1111, Silver_II,,,],
[creampufft#1111, Silver_II,,,],
```

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Join Query – "Find all players who have played a match on: Bind"

Default Searches

Find all players who have played a match on: Bind
Submit
Count the number of matches played on the map:
Submit
Find usernames of all players that have played the agent: Astra v more than once
Submit
Select the gun type(s) with the highest average credit cost:
Submit
Find the usernames of players who have played matches on ALL maps:
Submit
Return to Home

GUI shows:

```
Find all players who have played a match on: Ascent 🔻
Count the number of matches played on the map: Ascent 🔻 (grouped by gamemode)
Submit
Find usernames of all players that have played the agent: Astra
                                                               w more than once.
Select the gun type(s) with the highest average credit cost:
Find the usernames of players who have played matches on ALL maps:
Submit
Return to Home
JOIN result:
Bind
your answer:
blueberry#xiao (, )
namoraeh#rae (, )
matches:12973(13-06, Unrated, Bind, 45), 12974(10-13, Competitive, Haven, 60), 12975(22-40, Deathmatch, Ascent, 10),
blueberry#xiao (Gekko, 12973)
blueberry#xiao (Phoenix , 12974)
namoraeh#rae (Breach, 12973)
```

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Aggregation with GROUP BY Query – "Count the number of matches played on the map: Bind (grouped by gamemode)"

Default Searches

Find all players who have played a match on: Ascent
Submit
Count the number of matches played on the map: $\begin{tabular}{l} Bind & \end{tabular}$ (grouped by gamemode)
Submit
Find usernames of all players that have played the agent: $\begin{tabular}{ l l l l l l l l l l l l l l l l l l l$
Submit
Select the gun type(s) with the highest average credit cost:
Submit
Find the usernames of players who have played matches on ALL maps:
Submit
Return to Home

GUI shows:

Find all players who have played a match on: Ascent 🔻
Submit
Count the number of matches played on the map: $\boxed{\text{Ascent} \textbf{v}}$ (grouped by gamemode)
Submit
Find usernames of all players that have played the agent: $\begin{tabular}{ll} Astra & \begin{tabular}{c} \$
Submit
Select the gun type(s) with the highest average credit cost:
Submit
Find the usernames of players who have played matches on ALL maps:
Submit
Return to Home
Aggregation with GROUP BY result:
Bind
2(Unrated,)
1(Deathmatch,)

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Aggregation with HAVING Query – "Find usernames of all players that have played the agent: Breach more than once."

Default Searches

Find all players who have played a match on: Ascent 🔻
Submit
Count the number of matches played on the map: Ascent 🔻 (grouped by gamemode)
Submit
Find usernames of all players that have played the agent: Breach v more than once.
Submit
Select the gun type(s) with the highest average credit cost:
Submit
Find the usernames of players who have played matches on ALL maps:
Submit
Return to Home

GUI Shows:

Find all players who have played a match on: Ascent
Submit
Count the number of matches played on the map: $\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$
Submit
Find usernames of all players that have played the agent: $\begin{tabular}{c c} Astra \end{tabular}$ more than once.
Submit
Select the gun type(s) with the highest average credit cost:
Submit
Find the usernames of players who have played matches on ALL maps:
Submit
Return to Home
Aggregation with HAVING result: Breach namoraeh#rae (,)

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Nested Aggregation with GROUP BY: "Select the gun type(s) with the highest average credit cost"

Default Searches

Find all players who have played a match on: Ascent
Submit
Count the number of matches played on the map:
Submit
Find usernames of all players that have played the agent: $\begin{tabular}{ l l l l l l l l l l l l l l l l l l l$
Submit
Select the gun type(s) with the highest average credit cost:
Submit
Find the usernames of players who have played matches on ALL maps:
Submit
Return to Home

GUI shows:

Delault Scarciles
Find all players who have played a match on: Ascent 🔻
Submit
Count the number of matches played on the map: Ascent v (grouped by gamemode)
Submit
Find usernames of all players that have played the agent: Astra v more than once
Submit
Select the gun type(s) with the highest average credit cost:
Submit
Find the usernames of players who have played matches on ALL maps:
Submit
Return to Home
Nested Aggregation result:
Rifle

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For reference, the gun instances loaded into the database were:

Guns:

Vandal (Rifle, 2900), Phantom (Rifle, 2900), Guardian (Rifle, 2250), Spectre (SMG, 1600), Stinger (SMG, 1100),

Frenzy (Pistol, 450), Sheriff (Pistol, 800), Classic (Pistol, 0), Bucky (Shotgun, 850), Judge (Shotgun, 1850),

With Rifle having an average price of $^{\sim}2,683.33$, SMG having an average price of 1350, Shotgun having an average price of 1350, and Pistol having an average price of $^{\sim}416.67$.

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blueberry#xiao (,)

Division Query – "Find the usernames of players who have played matches on ALL maps"

For reference: Maps: Haven, Ascent, Bind, Matches: 12973(13-06, Unrated, Bind, 45), 12974(10-13, Competitive, Haven, 60), 12975(22-40, Deathmatch, Ascent, 10), plays: blueberry#xiao (Gekko, 12973), blueberry#xiao (Gekko, 12975), blueberry#xiao (Phoenix, 12974), namoraeh#rae (Breach, 12973), **GUI shows: Default Searches** Find all players who have played a match on: Ascent 🔻 Submit Count the number of matches played on the map: Ascent (grouped by gamemode) Submit Find usernames of all players that have played the agent: Astra w more than once. Submit Select the gun type(s) with the highest average credit cost: Submit Find the usernames of players who have played matches on ALL maps: Submit Return to Home Division result:

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SQL Script

CREATE TABLE player (username char(20) NOT NULL PRIMARY KEY, rank char(20), acct level int);

CREATE TABLE team (team_name char(20) NOT NULL PRIMARY KEY, num_of_members char(20) NOT NULL);

CREATE TABLE skin (skin name char(20) NOT NULL PRIMARY KEY, price int);

CREATE TABLE gun (gun_name char(20) NOT NULL PRIMARY KEY, gun_type char(20), c_cost int);

CREATE TABLE gamemode (gamemode_name char(20) NOT NULL PRIMARY KEY, num_of_players int);

CREATE TABLE map (map name char(20) NOT NULL PRIMARY KEY, numOfSites int);

CREATE TABLE agent (agent name char(20) NOT NULL PRIMARY KEY, role char(20));

CREATE TABLE match (match_ID int NOT NULL PRIMARY KEY, score char(5) NOT NULL, gamemode_name char(20) NOT NULL, map_name char(20) NOT NULL, duration int NOT NULL, FOREIGN KEY (gamemode_name) REFERENCES gamemode(gamemode_name) ON DELETE CASCADE, FOREIGN KEY (map_name) REFERENCES map(map_name) ON DELETE CASCADE);

CREATE TABLE ability (ability_name char(20) NOT NULL, agent_name char(20) NOT NULL, PRIMARY KEY (ability_name, agent_name), FOREIGN KEY (agent_name) REFERENCES agent(agent_name) ON DELETE CASCADE);

CREATE TABLE passive (ability_name char(20) NOT NULL, agent_name char(20) NOT NULL, PRIMARY KEY (ability_name, agent_name), FOREIGN KEY (ability_name, agent_name) REFERENCES ability(ability_name, agent_name) ON DELETE CASCADE);

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CREATE TABLE active (ability_name char(20) NOT NULL, agent_name char(20) NOT NULL, c_cost int, PRIMARY KEY (ability_name, agent_name), FOREIGN KEY (ability_name, agent_name) REFERENCES ability(ability_name, agent_name) ON DELETE CASCADE);

CREATE TABLE owns (username char(20) NOT NULL, skin_name char(20) NOT NULL, PRIMARY KEY (username, skin_name), FOREIGN KEY (username) REFERENCES player(username) ON DELETE CASCADE, FOREIGN KEY (skin_name) REFERENCES skin(skin_name) ON DELETE CASCADE);

CREATE TABLE for_gun (skin_name char(20) NOT NULL, gun_name char(20) NOT NULL, PRIMARY KEY (skin_name, gun_name), FOREIGN KEY (gun_name) REFERENCES gun(gun_name) ON DELETE CASCADE);

CREATE TABLE plays (username char(20) NOT NULL, agent_name char(20) NOT NULL, match_ID int NOT NULL, PRIMARY KEY (username, agent_name, match_ID), FOREIGN KEY (username) REFERENCES player(username) ON DELETE CASCADE, FOREIGN KEY (agent_name) REFERENCES agent(agent_name) ON DELETE CASCADE, FOREIGN KEY (match_ID) REFERENCES match(match_ID) ON DELETE CASCADE);

CREATE TABLE isOn (username char(20) NOT NULL, team_name char(20) NOT NULL, PRIMARY KEY (username, team_name), FOREIGN KEY (username) REFERENCES player(username) ON DELETE CASCADE, FOREIGN KEY (team_name) REFERENCES team(team_name) ON DELETE CASCADE);

BEGIN

```
INSERT INTO player VALUES ('namoraeh#rae', 'Silver_II', 254);
INSERT INTO player VALUES ('mango#tango', 'Platinum_I', 356);
INSERT INTO player VALUES ('blueberry#xiao', 'Silver_II', 280);
INSERT INTO player VALUES ('strawberry#3864', 'Gold_III', 86);
INSERT INTO player VALUES ('spaghetti#6969', 'Iron_III', 45);
INSERT INTO player VALUES ('spaghett#6969', 'Iron_III', 45);
INSERT INTO player VALUES ('fruittart#1111', 'Silver_II', 45);
INSERT INTO player VALUES ('cake#1111', 'Silver_II', 45);
INSERT INTO player VALUES ('creampufft#1111', 'Silver_II', 45);
END;
```

```
BEGIN
  INSERT INTO team (team name, num of members) VALUES ('Fruits', 3);
  INSERT INTO team (team name, num of members) VALUES ('Team Name
Pending', 2);
  INSERT INTO team (team name, num of members) VALUES ('Sweets', 3);
END;
BEGIN
  INSERT INTO isOn VALUES ('mango#tango', 'Fruits');
  INSERT INTO isOn VALUES ('strawberry#3864', 'Fruits');
  INSERT INTO isOn VALUES ('blueberry#xiao', 'Fruits');
  INSERT INTO isOn VALUES ('namoraeh#rae', 'Team Name Pending');
  INSERT INTO isOn VALUES ('spaghetti#6969', 'Team Name Pending');
  INSERT INTO isOn VALUES ('fruittart#1111', 'Sweets');
  INSERT INTO isOn VALUES ('cake#1111', 'Sweets');
  INSERT INTO isOn VALUES ('creampufft#1111', 'Sweets');
END;
BEGIN
  INSERT INTO map VALUES ('Haven', 3);
  INSERT INTO map VALUES ('Ascent', 2);
  INSERT INTO map VALUES ('Bind', 2);
END;
BEGIN
  INSERT INTO gamemode VALUES ('Unrated', 10);
  INSERT INTO gamemode VALUES ('Competitive', 10);
  INSERT INTO gamemode VALUES ('Deathmatch', 14);
END;
BEGIN
  INSERT INTO match VALUES (12973, '13-06', 'Unrated', 'Bind', 45);
 INSERT INTO match VALUES (12974, '10-13', 'Competitive', 'Haven', 60);
  INSERT INTO match VALUES (12975, '22-40', 'Deathmatch', 'Ascent', 10);
END;
```

```
BEGIN
  INSERT INTO gun VALUES ('Vandal', 'Rifle', 2900);
  INSERT INTO gun VALUES ('Phantom', 'Rifle', 2900);
  INSERT INTO gun VALUES ('Guardian', 'Rifle', 2250);
  INSERT INTO gun VALUES ('Spectre', 'SMG', 1600);
  INSERT INTO gun VALUES ('Stinger', 'SMG', 1100);
  INSERT INTO gun VALUES ('Frenzy', 'Pistol', 450);
  INSERT INTO gun VALUES ('Sheriff', 'Pistol', 800);
  INSERT INTO gun VALUES ('Classic', 'Pistol', 0);
  INSERT INTO gun VALUES ('Bucky', 'Shotgun', 850);
  INSERT INTO gun VALUES ('Judge', 'Shotgun', 1850);
END;
BEGIN
  INSERT INTO skin VALUES ('Silvanus', 1275);
  INSERT INTO skin VALUES ('Prime', 1775);
  INSERT INTO skin VALUES ('Smite', 875);
END;
BEGIN
  INSERT INTO owns VALUES ('namoraeh#rae', 'Prime');
  INSERT INTO owns VALUES ('strawberry#3864', 'Prime');
  INSERT INTO owns VALUES ('blueberry#xiao', 'Smite');
END;
BEGIN
  INSERT INTO for gun VALUES ('Prime', 'Vandal');
  INSERT INTO for gun VALUES ('Prime', 'Frenzy');
  INSERT INTO for gun VALUES ('Smite', 'Spectre');
END;
BEGIN
  INSERT INTO agent VALUES ('Phoenix', 'Duelist');
  INSERT INTO agent VALUES ('Breach', 'Initiator');
  INSERT INTO agent VALUES ('Gekko', 'Initiator');
END;
```

```
BEGIN
  INSERT INTO ability VALUES ('Flashpoint', 'Breach');
  INSERT INTO ability VALUES ('Hot Hands', 'Phoenix');
  INSERT INTO ability VALUES ('Buddy Orb', 'Gekko');
END;
BEGIN
  INSERT INTO active VALUES ('Flashpoint', 'Breach', 250);
  INSERT INTO active VALUES ('Hot Hands', 'Phoenix', 0);
END;
BEGIN
  INSERT INTO passive VALUES ('Buddy Orb', 'Gekko');
END;
BEGIN
  INSERT INTO plays VALUES ('namoraeh#rae', 'Breach', 12973);
  INSERT INTO plays VALUES ('blueberry#xiao', 'Gekko', 12973);
  INSERT INTO plays VALUES ('blueberry#xiao', 'Phoenix', 12974);
  INSERT INTO plays VALUES ('blueberry#xiao', 'Gekko', 12975);
END;
```