Counter Strike Global Offensive Tournament Database

Functional Requirements and Business Rules

Adding a Team

To add a team to participate in a tournament, first its players must be added. The following information must be provided for each player:

a) In-game username (Must be unique)
b) First name
c) Last name
d) Team name that they will be a part of

If the players selected in-game username is already entered in the system, the player must be denied until they can confirm they are not a duplicate. If it is determined the player is unique but the chosen in-game username that was chosen was not unique then the player must select a new username to use in game.

A team must have **exactly** five players. Once the team has registered each of its intended players, then the team itself can be registered. The team must provide the following information:

a) Team name (Must be unique)
b) Player 1 in-game username
c) Player 2 in-game username
d) Player 3 in-game username
e) Player 4 in-game username
f) Player 5 in-game username

Recording Match Results

After a match has been completed data and statistics from the match must be recorded. First a Match ID number must be generated. This number should start at 1 and increment for every match thereafter. Statistics are to be gathered from the demo recording of the match. For organizational purposes, the team that starts Counter-Terrorist side will always be recorded as Team 1. From each demo the following are required to be recorded from each match:

a) Map Name
b) Team 1 Name
c) Number of rounds Team 1 won during first half
d) Number of rounds Team 1 won during second half
e) Total rounds won by Team 1
f) Team 2 Name
g) Number of rounds Team 2 won during first half
h) Number of rounds Team 2 won during second half
i) Total round won by Team 2

j) Best of Three Value (0 if the match is **not** best of 3, 1 if it is the first game in the best of 3 series, 2 if it is the second game in the series, and 3 if it is the third game in the series)

Recording Individual Statistics

After a match has been entered, each of the ten players that participated must have their individual statistics entered. Statistics are to be gathered from the demo recording of the match and previously entered information. The following statistics are to be recorded:

a) Match ID number
b) Player in-game username
c) Team name
d) Kills
e) Deaths
f) Assists
g) Average damage per round
h) Headshot percentage
i) K/D Ratio

Altering Player and Team Information

Several situations can arise where Team or Player information may need to be changed.

If a player is found to be cheating, all player statistic entries are to be removed. Additionally, the player entry is to be deleted. The team entry is to remove the player from their rosters and register a new player to take the cheaters place. The new player then must be added to the team's roster.

If a player wishes to stop playing voluntarily or the team wants to terminate them from their team, the player must be removed from the team entry. The player registration must then be updated so the team field for the player is set as null. The team is responsible for registering a new player to fill the slot and then adding them to their roster.

Business Rules

a) A team must have exactly 5 players
b) Each player can only belong to 1 and only 1 team at a time
c) Each match must contain exactly 2 teams
d) A team may participate in many matches
e) A match may generate up to 10 player statistics entries
f) Each player statistic entry must reference 1 and only 1 match
g) A player may have many player statistics entries
h) Each player statistics entry must reference one and only 1 player