

COE848 Lab3 Report – Database Design
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```
.dump
PRAGMA foreign_keys=OFF;
BEGIN TRANSACTION;
CREATE TABLE players (
playerID INTEGER PRIMARY KEY AUTOINCREMENT NOT NULL,
name VARCHAR(255),
position VARCHAR(24),
kp INTEGER,
avgkDA INTEGER,
avgCSM INTEGER);
CREATE TABLE champions (
championID INTEGER PRIMARY KEY AUTOINCREMENT NOT NULL,
name VARCHAR(255),
pickrate INTEGER,
banrate INTEGER,
winrate INTEGER);
CREATE TABLE designer (
designerID INTEGER PRIMARY KEY AUTOINCREMENT NOT NULL,
name VARCHAR(255));
CREATE TABLE designers (
designerID INTEGER PRIMARY KEY AUTOINCREMENT NOT NULL,
name VARCHAR(255));
CREATE TABLE teams (
teamID INTEGER PRIMARY KEY AUTOINCREMENT NOT NULL,
name VARCHAR(255),
region VARCHAR(255),
winrate INTEGER,
avgGD INTEGER,
avgDPG INTEGER);
CREATE TABLE tournaments (
tournamentID INTEGER PRIMARY KEY AUTOINCREMENT NOT NULL,
splitname VARCHAR(255),
region VARCHAR(255),
prizepool INTEGER,
numberofgames INTEGER);
CREATE TABLE matches (
matchID INTEGER PRIMARY KEY AUTOINCREMENT NOT NULL,
participatingteams VARCHAR(255),
duration INTEGER,
totalkills INTEGER);
CREATE TABLE player_plays_champion (
playID INTEGER PRIMARY KEY AUTOINCREMENT NOT NULL,
player_id INTEGER,
champion_id INTEGER,
CONSTRAINT fk_player_id FOREIGN KEY (player_id) REFERENCES player(playerID)
CONSTRAINT fk_champion_id FOREIGN KEY (champion_id) REFERENCES champion(championID));
CREATE TABLE designer_designs_champion (
designID INTEGER PRIMARY KEY AUTOINCREMENT NOT NULL,
designer_id INTEGER,
champion_id INTEGER,
CONSTRAINT fk_designer_id FOREIGN KEY (designer_id) REFERENCES designers(designerID)
CONSTRAINT fk_champion_id FOREIGN KEY (champion_id) REFERENCES champions(championID)
);
CREATE TABLE team_has_player (
teampayerID INTEGER PRIMARY KEY AUTOINCREMENT NOT NULL,
team_id INTEGER,
player_id INTEGER,
CONSTRAINT fk_team_id FOREIGN KEY (team_id) REFERENCES teams(teamID),
CONSTRAINT fk_player_id FOREIGN KEY (player_id) REFERENCES players(playerID));
CREATE TABLE tournament_has_team (
tournamentteamID INTEGER PRIMARY KEY AUTOINCREMENT NOT NULL,
tournament_id INTEGER,
team_id INTEGER,
CONSTRAINT fk_tournament_id FOREIGN KEY (tournament_id) REFERENCES tournaments(tournamentID),
CONSTRAINT fk_team_id FOREIGN KEY (team_id) REFERENCES teams(teamID));
```

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Players: This entity holds the person's statistics	
playerID (int)	Player entity's autoincremented primary key
name (varchar)	Person's in-game name
position (varchar)	Lane that the person plays
avgKDA (int)	Average kills/deaths/assists ratio
avgCSM (int)	Average creep score per minute
kp (int)	Average Kill participation

Champions: This entity holds the character's pre/post game statistics	
championID (int)	Champion entity's autoincremented primary key
name (varchar)	Name of the character
pick rate (int)	Number of games played in / Total games
ban rate (int)	Number of games banned / Total games
win rate (int)	Number of wins / Total games

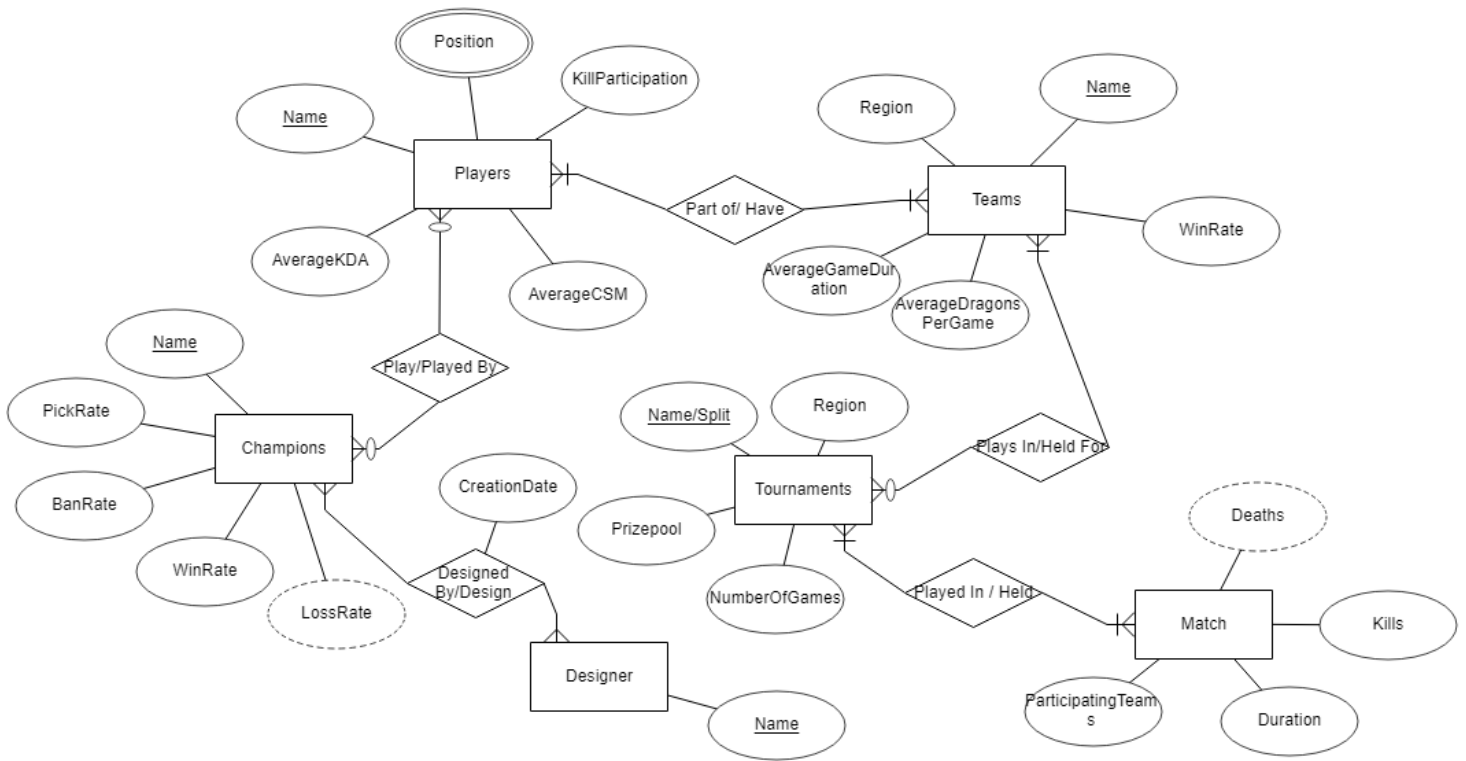
Teams: This entity holds the team's details	
teamID (int)	Team entity's autoincremented primary key
Name (varchar)	Name of organization
Region (varchar)	Region the team plays in
win rate (int)	Number of wins / Total games
avgDPM (int)	Sum of dragons per game/ Total games
avgGD (int)	Sum of duration of games / Total games

Tournaments: This entity holds the tournament's details	
tournamentID (int)	Tournament entity's autoincremented primary key
splitname (varchar)	Name of the tournament with the split its played in
Region (varchar)	Region the tournament is held in
Numberofgames (int)	Total number of matches played
Prizepool (int)	Total amount of money to be won

Match: This entity holds the match's details	
matchID (int)	Match entity's autoincremented primary key
Participatingteams (varchar)	Name of teams that played in this match
Duration (int)	The total time of the game
Kills (int)	Total accumulated kills per team

Designer: This entity holds the creator of the champion's details	
designerID (int)	Designer entity's autoincremented primary key
name (varchar)	Name of the creator

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Relationship Tables		
player_plays_champion	Many to Many	playid: Surrogate key
		player_id: foreign key related to playerID
		champion_id: foreign key related to championID
designer_designs_champion	Many to Many	designid: Surrogate key
		designer_id: foreign key related to designerID
		champion_id: foreign key related to championID
team_has_player	Many to Many	teamplayerid: Surrogate key
		team_id: foreign key related to teamID
		player_id: foreign key related to playerID
tournament_has_team	Many to Many	tournamentteamid: Surrogate key
		tournament_id: foreign key related to tournamentID
		team_id: foreign key related to teamID
tournament_holds_match	Many to Many	tournamentmatchid: Surrogate key
		tournament_id: foreign key related to tournamentID
		match_id: foreign key related to matchID