Player entity:
- PlayerID (PK)
- Name
- Elo Rating

Player_Game (associative entity):
- GameID (FK,PK)
- Role (white or black)
- PlayerID (FK, PK)

Player —1— Player_Game

Game entity:
- GameID (PK)
- Round
- Result
- List of moves
- EventID (FK)
- WhitePlayerID (FK)
- BlackPlayerID (FK)

Player_Game —M— Game

Event entity:
- EventID (PK)
- Name
- Site
- Date

Event_Game (relationship):
- GameID (PK,FK)
- EventID (PK,FK)

Event —1— Event_Game —M— Game

```
SQL COMMANDS:
//entity: player table
CREATE TABLE Player (
    PlayerID INT PRIMARY KEY,
    Name VARCHAR(100),
    EloRating INT
);

//entity: event table
CREATE TABLE Event (
    EventID INT PRIMARY KEY,
    Name VARCHAR(100),
    Site VARCHAR(100),
    Date DATE,
    UNIQUE (Name, Date) //no two events with the same name on the same date
);

// entity: game table
CREATE TABLE Game (
    GameID INT PRIMARY KEY,
    Round INT,
    Result CHAR(5) CHECK (Result IN ('1-0', '0-1', '1/2-1/2')),
    Moves VARCHAR(1000),
    EventID INT,
    WhitePlayerID INT,
    BlackPlayerID INT,
    FOREIGN KEY (EventID) REFERENCES Event(EventID),
    FOREIGN KEY (WhitePlayerID) REFERENCES Player(PlayerID),
    FOREIGN KEY (BlackPlayerID) REFERENCES Player(PlayerID),
    UNIQUE (EventID, Round, WhitePlayerID, BlackPlayerID)
    //no round can b played with players in the same roles as another game
);

//create relationship between event and game
CREATE TABLE Event_Game (
    EventID INT,
    GameID INT,
    PRIMARY KEY (EventID, GameID),
    FOREIGN KEY (EventID) REFERENCES Event(EventID),
    FOREIGN KEY (GameID) REFERENCES Game(GameID)
);

//create weak entity of player_game
CREATE TABLE Player_Game (
```

```sql
    GameID INT,
    PlayerID INT,
    Role VARCHAR(5) CHECK (Role IN ('White', 'Black')),
    PRIMARY KEY (GameID, PlayerID),
    FOREIGN KEY (GameID) REFERENCES Game(GameID),
    FOREIGN KEY (PlayerID) REFERENCES Player(PlayerID)
);
```