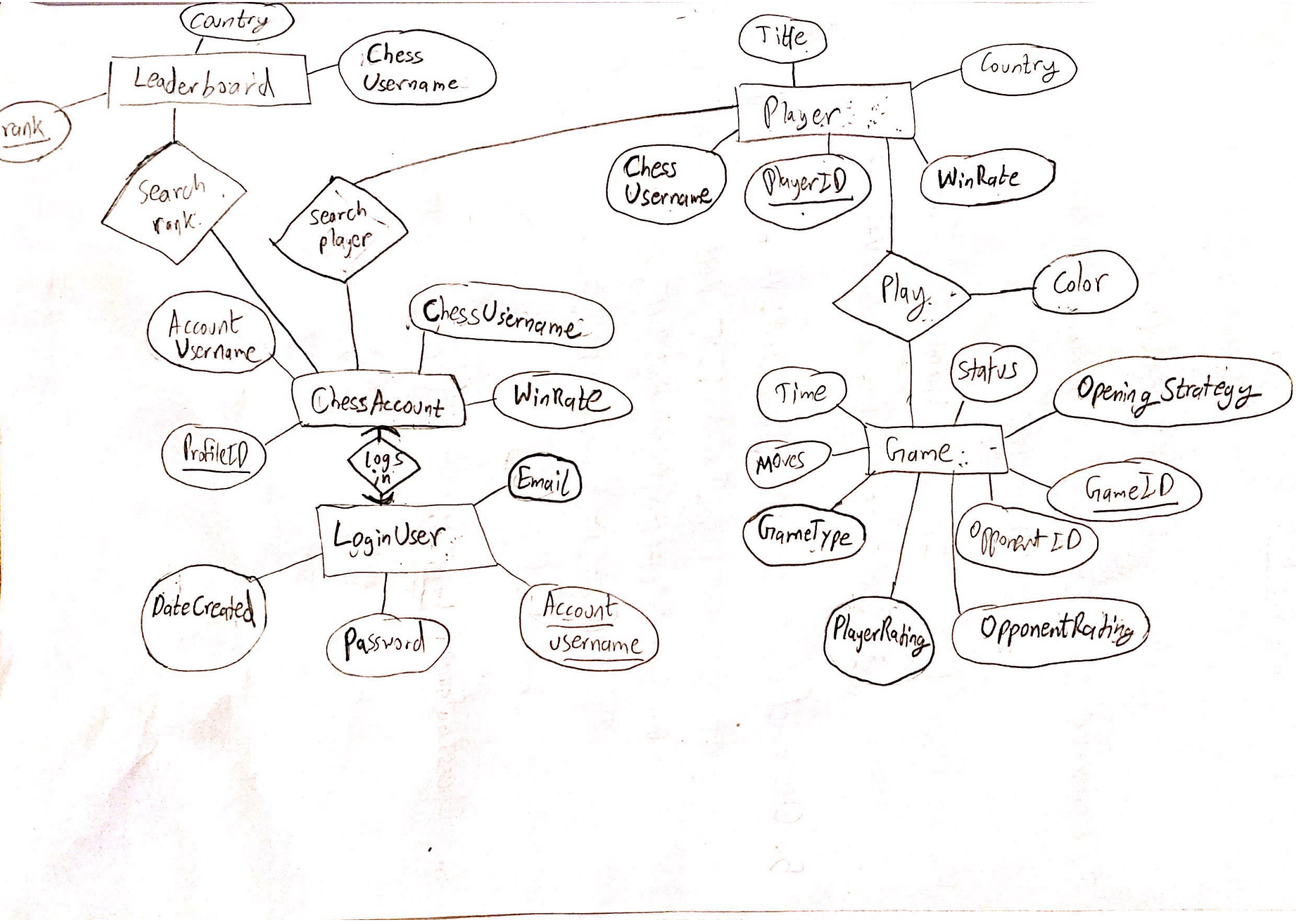

Relational Schema

1. LoginUser (AccountUsername: VARCHAR(50)[PK], Email: VARCHAR(50), DateCreated: VARCHAR(50), Password: VARCHAR(50))

2. ChessAccount (ProfileID: INT [PK], AccountUsername: VARCHAR[50] [FK to LoginUser.AccountUsername], Winrate: INT, ChessUsername: VARCHAR(50))

3. Leaderboard (Rank: INT [PK], ChessUsername: VARCHAR(50), Country: VARCHAR(50))

4. ChessPlayer (PlayerID: INT [PK], Winrate: INT, Title: VARCHAR(50), Country: VARCHAR(50), ChessUsername: VARCHAR(50))

5. ChessGame (GameID: INT [PK], OpeningStrat: VARCHAR(50), Status: VARCHAR(50), TimeTaken: INT, Moves: VARCHAR(255), GameType: VARCHAR(50), PlayerRating: INT, OpponentID: INT, OpponentRating: INT, PlayerID: INT [FK to ChessPlayer.PlayerID])

6. ChessPlay (PlayerID: INT [PK], GameID: INT [PK], Color: VARCHAR(50))

Assumptions

1. Every User will have only one Chess account associated with their user account and every chess account can only have one User account (1:1 relationship)
2. Every Chessaccount can search for multiple ranks on the leaderboard and every individual on the leaderboard can be searched by several chess accounts (many to many relationship)
3. Every chess account can search for several opposing players and every player can be searched by several chess accounts (many to many relationship)
4. Every player plays several games, while two players play every game (many to many relationship)

Description of Relationship

1. Each player plays each game with a particular role/colour (black or white)
2. Each user logs into a user account and each user account is associated with his/her chess account
3. A chess account user inputs a number, the rank they want to search for, into our UI and this number is used to retrieve country and chess username of the player with that number as rank
4. A chess account user inputs a string, the chess username they want to search for, into our UI and this username is used to retrieve that player's winrate, country, title etc.