Danny Luong

Luther Pedeglorio

Nicholas Randhawa

Anahit Sarao

Dennis Simon

Competitive Online Chess Game

Entity functionalities/operations/attributes

* User(disjoint to player/game dev/moderator)
  + Username
  + Password (HASHED)
  + E-mail
  + User Identifier(User is basic player, game dev or moderator)
    - Player(disjoint from User inherits User attributes)
      * Skill rating(beginner, intermediate, advanced)
      * Location
      * Games played
      * Win/Loss Streak
      * How long player has been registered
      * Punishments handed(bans/kicks/mutes)
    - Game Dev(disjoint from User inherits User attributes)
      * Developer rights
    - Moderator(disjoint from User inherits User attributes)
      * Administrative powers(ban/kick/mute)
* Gameboard Type
  + Background Color
  + Grid number
  + Chess piece color
  + Timer
* Game Lobby
  + Minimum Skill rating
  + Waitlist
  + Viewers
  + Gameboard Type
* Match statistics
  + Match ID
  + Chess piece ID
    - Move history of chess piece
    - Start position of chess piece
    - End position of chess piece
  + Player side
* Game History
  + Match ID
  + Black Player ID
  + White Player ID
  + Moves played
  + Date/time
  + Winner
  + ELO Change
  + Length of match
  + Average play time
  + Replay video download

The purpose of this database is to store the data behind an online free to play chess game. The intended userbase is anyone who is interested in chess. Since there is an skill rating system to match players with similar skill levels, the game will be intended for high level chess players, intermediate players and new players.

Actors

The main actor within the miniworld will consist of average users which have interest towards chess. The players will be broken into different groups based on skill rankings. The ranks will be beginner, moderate, and intermediate. The second type of actor is a moderator. Moderators in our miniworld have administrative rights which allow them to control policy issues such as cheating. The third major actor are game devs that have access to the backend code to fix any bugs that may arise in the game and push out improvements.

Scenario 1:

Given that an individual wanted to play chess, he or she would have to go to the website and register for an account with an email address. They would have to create a unique username and password. The individual is then assigned a beginner skill level and can then proceed to the game lobby, where then can interact with other players of the same skill level and within close proximity.

Scenario 2:

Two registered users are both interested in playing and both hit the “play online button”. They will be taken into a list of chess lobbies, the users will be taken to a list of chess lobbies that they can join(or join the waitlist for, or watch play). After both users have joined the lobby and readied up to play, they will be randomly assigned a side and the game will be played out.