

User

Responsibilities

id
name
gamesWon
gamesLost

Collaborators

GameManager
Database
GUI

Abstract

Piece

Responsibilities

color
location
eliminated
getPossibleMoves

Collaborators

GameManager
GUI

Pawn + (Rook, Bishop, Knight, Queen, King)

Responsibilities

color
location
eliminated
getPossibleMoves

Collaborators

Piece
GameManager
GUI

GameManager

Responsibilities

Board -> Piece[][]
whitePiecesOut
blackPiecesOut
playerWhite
playerBlack
playerInTurn
makeMove
startGame
endGame

Collaborators

User
Piece (and subclasses)
Move
AI

GUI (Activities + Fragments)

Responsibilities

Collection of Android Studio Activities and Fragments that make up the GUI of the app.

Collaborators

User
Piece (and subclasses)
Login
Database

Move

Responsibilities

color
code

(This class is used to store moves in the
database)

Collaborators

Database
User
GameManager

Login

Responsibilities

inputUsername
inputPassword
checkInfo
getUserInfo

Collaborators

GUI
Database

Matchmaker

Responsibilities

Handles user requests to join a game.
Using the database, it pairs users
together to play chess.

Collaborators

User
Database
GUI
GameManager

AI

Responsibilities

Handles all the logic behind the AI when playing single player.
We will work on this part of the program once the multiplayer is working.

Collaborators

GameManger
GUI

Database

Responsibilities

Layer of abstraction in front of the firebase API. Allows for simple fetching and editing the database.

Collaborators

User
GameManager
GUI
Move
Login
Matchmaker