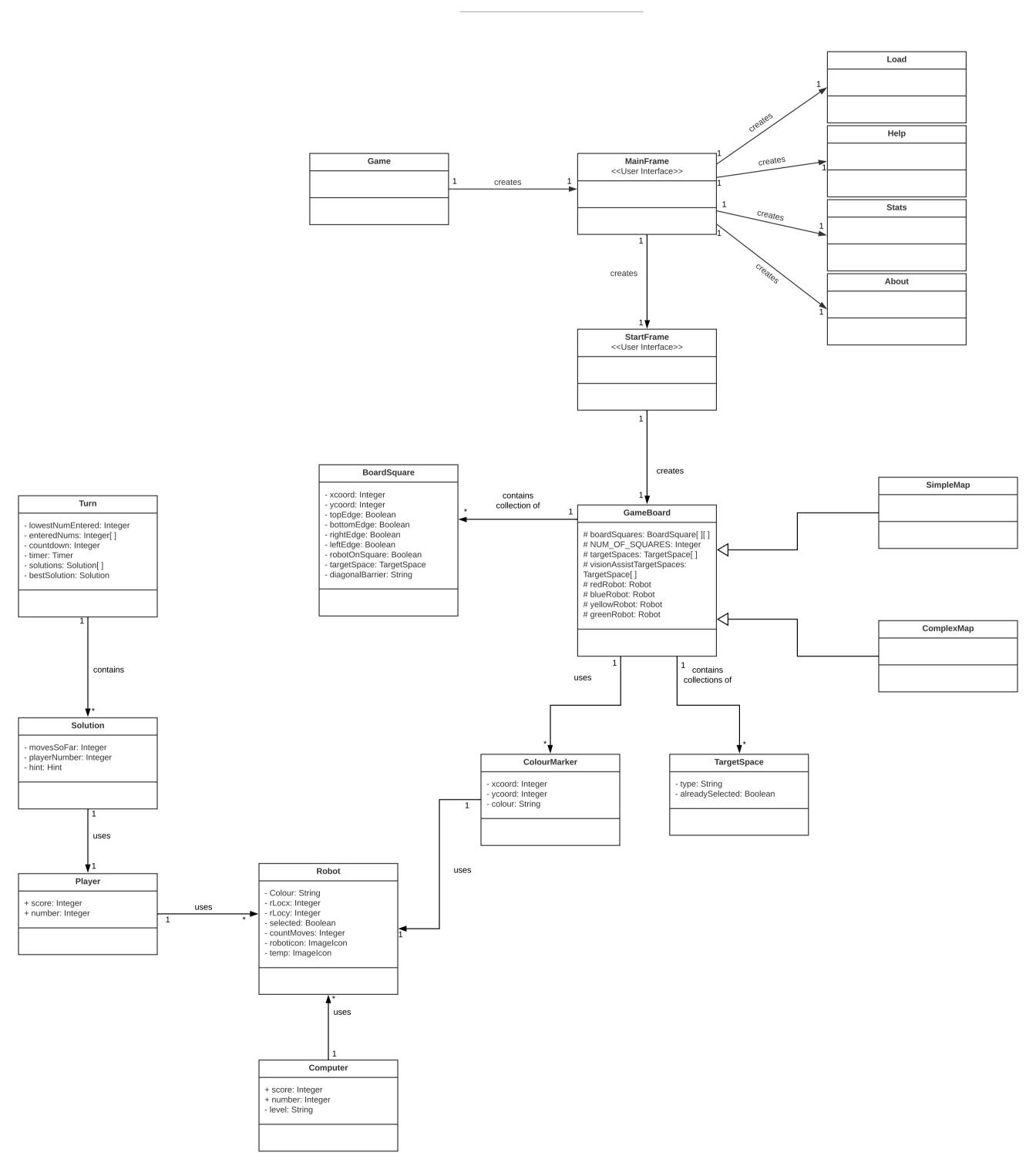
OVERALL CLASS DIAGRAM

Ricochet Robots Project

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Richochet Robots Class Specification

Player **BoardSquare** Solution Robot Turn + score: Integer - xcoord: Integer - movesSoFar: Integer - Colour: String - lowestNumEntered: Integer - ycoord: Integer + number: Integer - playerNumber: Integer - rLocx: Integer - enteredNums: Integer[] - topEdge: Boolean - hint: Hint - rLocy: Integer - countdown: Integer - bottomEdge: Boolean - selected: Boolean - timer: Timer - rightEdge: Boolean - countMoves: Integer - solutions: Solution[] + checkIfValid(): Boolean - leftEdge: Boolean - roboticon: Imagelcon - bestSolution: Solution addToMoves() - robotOnSquare: Boolean - temp: ImageIcon targetSpace: String + findBestSolution(): Solution - diagonalBarrier: String + changeState() + checkIfNumMatches(): Boolean + setRobots() + startNewSolution() + BoardSquare() + moveToSquare() + checkTopEdge(): Boolean + Robot() + checkBottomEdge(): Boolean + addImage(+ checkRightEdge(): Boolean + move(Integer, Integer) + checkLeftEdge(): Boolean GameBoard # boardSquares: BoardSquare[][] SimpleMap Game ComplexMap **TargetSpace** # NUM_OF_SQUARES: Integer # targetSpaces: TargetSpace[] - type: String # visionAssistTargetSpaces: - alreadySelected: Boolean TargetSpace[] + main() # redRobot: Robot + SimpleMap() + handleDiagonalBarrier() # blueRobot: Robot + ComplexMap() + run() # yellowRobot: Robot + visionAssist() # greenRobot: Robot + visionAssist() + chooseTargetSpace() ColourMarker **StartFrame** MainFrame Help Load <<User Interface>> <<User Interface>> - xcoord: Integer - ycoord: Integer playerType: String[] - colour: String compType: String[] + Help() + Load() - menu() + start() + moveUnderRobot() + displayInstructions() + visionAssist(true) **About** Computer **Stats**

+ score: Integer + number: Integer - level: String

+ Computer() + takeEasyTurn() + takeHardTurn()

Notes:

+ Stats()

- menu()

+ displayStats()

-SimpleMap and ComplexMap will be subclasses of GameBoard.

+ About()

- menu()

aboutDetails()

-The # symbol indicates protected access.