model

Board

-rows : int
-columns : int
-mirrorNumber : int
-firstBox : Box

+Board(rows : int, columns : int, mirrorNumber : int)
+generateBoxes() : void
-generateBoxes(lastAddedBox : Box, currentRow : int, currentColumn : int, upperBox : Box) : void
-getFirstColumnBox(row : int) : Box
-getFirstColumnBox(currentBox : Box, row : int) : Box
+addMirrors(mirrorsToAssign : int) : void
-addMirrors(currentBox : Box, row : int, column : int) : void
-columnsLine(currentBox : Box) : String
+toString(startBox : String, finishBox : String, findedBox : String, cheat : boolean) : String
-toString(firstinRow : Box, currentBox : Box, startBox : String, finishBox : String, findedBox : String, cheat : boolean) : String
-getInBoxValue(currentBox : Box, startBox : String, finishBox : String, findedBox : String, cheat : boolean) : String
+getBox(id : String) : Box
-getBox(currentBox : Box, row : int, column : int) : Box

Box

-row : int
-column : int
-founded : boolean
-upperBox : Box
-bottomBox : Box
-rightBox : Box
-leftBox : Box
-mirror : Mirror

+Box(row : int, column : int)
+getId() : String

-bottomBox
-leftBox
-rightBox
-upperBox
-firstBox

exceptions

InvalidOptionException

-serialVersionUID : long = 1

+InvalidOptionException(input : String)

ui

Main

+main(args : String[]) : void

menu

Player

-serialVersionUID : long = 1L
-name : String
-score : int
-father : Player
-left : Player
-rigth : Player

+Player(name : String, score : int)

-father
-left
-rigth

<<enumeration>>
Mirror

-mirror : String

-Mirror(mirror : String)
+getString() : String

RIGHT_MIRROR
LEFT_MIRROR
EMPTY

-mirror

-board

Game

-playerName : String
-score : int
-cheat : boolean
-remainingMirrors : int
-board : Board

+Game(playerName : String, rows : int, columns : int, mirrorNumber : int)
+drawBoard(startBox : String, finishBox : String, findedBox : String) : String
+shoot(input : String) : String
+shootFromCorner(input : String) : String
-shootLeft(currentBox : Box) : Box
-shootRight(currentBox : Box) : Box
-shootUpward(currentBox : Box) : Box
-shootDownward(currentBox : Box) : Box
+locate(input : String) : String

-root

game

DataManager

-GAME_FILE_NAME : String = "data/game_data.mgd"
-root : Player

+DataManager()
+saveData() : void
+loadData() : void
+addPlayer(name : String, score : int) : void
-addPlayer(currentPlayer : Player, newPlayer : Player) : void
+toString() : String
-inOrder(currentPlayer : Player) : String

Menu

-in : Scanner
-dManager : DataManager

+Menu()
-pressAnyKeyToContinue() : void
+startProgram() : void
-showMenu() : void
-principalMenu() : void
-runOptions(option : int) : boolean
-runOptionOne() : void
-startGame() : Game
-runGame(game : Game, sBox : String, eBox : String, located : String) : void
-validId(game : Game, input : String) : boolean
-isShootFromCorner(input : String, game : Game) : boolean
-isShoot(input : String, game : Game) : boolean
-isLocate(input : String, game : Game) : boolean
-runOptionTwo() : void

dManager