

RandomGrid
-grid : Square[][]
<<constructor>> Square(width : int, height : int, greenWeight : double, yellowWeight : double, redWeight : double, hazardWeight : double, wallWeight : double, jackpots : int) <<constructor>> Square(width : int, height : int) +getWidth() : int +getHeight() : int +getGreenWeight() : double +getYellowWeight() : double +getRedWeight() : double +getHazardWeight() : double +getWallWeight() : double +getJackpots() : int +toHazard(i : int, j : int) +toString() : String

Enum Direction
+DOWN, LEFT, RIGHT, UP
<<constructor>> Direction(string : String) +toString() : String

Move
-direction : Direction -distance : int
<<constructor>> Move(direction : Direction, distance : int, valid: boolean) +getDirection() : Direction +setDirection(direction : Direction) +getDistance() : int +setDistance(distance : int) +toString() : String

Player
-xPosition : int -yPosition : int
<<constructor>> Player(xPosition : int, yPosition : int) +makeMove(move : Move) +getXPosition() : int +getYPosition() : int +setPosition(x : int, y : int) +toString() : String

Enum Difficulty
+EASY, MEDIUM, HARD, VOLCANIC
<<constructor>> Difficulty(string : String)

+toString() : String

Game

-grid : RandomGrid -player : Player -score : Score -rumbling : boolean -startTime : double -gameOver : boolean

<<constructor>> Game(gridWidth : int, gridHeight : int, playerStartingXPosition : int, playerStartingYPosition : int, difficulty : Difficulty) +getGrid() : RandomGrid +getPlayer() : Player +makeMove(move : Move) +setPosition(x : int, y : int) +getScore() : int +increaseScore(points : int) +isRumbling() : boolean +setRumbling(rumbling : boolean) +getTimeElapsed() : double +resetTime() +isGameOver : boolean +setGameOver : boolean

TimedGame extends Game

timeLimit : double

<<constructor>> TimedGame(gridWidth : int, gridHeight : int, playerStartingXPosition : int, playerStartingYPosition : int, difficulty : Difficulty, timeLimit : Double) +getTimeRemaining() : double
