

Cat

Manages its Coordinate
Auto moves the Cat
Checks if it is in the same position as something else

moveCharacter
getCoordinate
inSamePosition
autoMaze

Player

Manages its Coordinate
Checks if it is in the same position as something else

moveCharacter
getCoordinate
inSamePosition

Coordinate

Checks if the coordinate equals passed is equal
Gets an offset for the Generator
Creates a random Coordinate

getOffset
getRandomCoordinate

Maze

Creates the maze
Retrieves specific cell based on coordinate & row/column
Checks if a coordinate is in valid play space

initializeMaze
getCell
isInside
generateMaze
validateNo2x2Cells
validatePlayersPosition
induceCycles

MazeCell

is 2 border, moveable, cat, player, visible, cheese, player visited & algorithm visited

isBorder
setBorder
isMoveable
setMoveable
isCat
setCat
isPlayer
setPlayer
isCheese
setCheese
isVisited
setVisited
isPlayerVisited
setPlayerVisited
isAlgorithmVisited
setAlgorithmVisited

Generate maze using randomized depth-first-search
Validate the 2x2 restriction
Add players to the cell
Create maze P2th loops

MazeDisplay

Prints Maze
errry slowly
(Hidden)
reveals full
Maze

printMaze
revealMaze
unhideMaze
printCell

Reveals the
radius
Prints the
cell type

MazeGrid Helper

/only for methods
that don't fit in
MazeGrid

Check if player
move is valid

check Valid Move

MazeGrid

Get player Coordinate
Move player & update
cats
Check win/loss
Spwn player & cats

get PlayerPosition
handlePlayerMove
updatePlayerPosition
updateCatPosition
setLost / getLost
checkWinCondition
setInitialCoordinate

Game

Get player Coordinate
Move player & update
cats
Check win/loss
Spwn player & cats

get PlayerPosition
handlePlayerMove
updatePlayerPosition
updateCatPosition
setLost / getLost
checkWinCondition
setInitialCoordinate

Display

Call menu main()
loop

GameHelper

/only for text
based io
Get input
(w/ error
handling)
Print welcome
Print help

getInput
print Welcome Message
print Help