

RoboRally Classes

mandag 15. februar 2021 22:00

Does not contain all methods and variables. Some are repetitive for same type.

Game
Grid grid
HashSet<Player> players
ArrayList<Flag> flags
HashMap<Flag, Player> flags_have_player
CardDealer dealer;
ArrayList<ArchiveMarker> archiveMarkers
boolean gameOver
HashMap<Player, List<Card>> givenProgramCards
HashMap<Player, ArrayList<Card>> chosenProgramCards;

Direction
Enum: NORTH, EAST, SOUTH, WEST
Direction rotateRight()
Direction rotate180()
Direction rotateLeft()

Grid (int width, int height)
int width
int height
ArrayList<ArrayList<HashSet<GridObject>>> grid
boolean containsRobot(Position)
Flag getFlatAtPosition(Position)
boolean positionHasFlag(Position)
boolean checkInBounds(Position)
HashSet<GridObject> getGridObjectsFromPosition(Position)
void addGridObject(GridObject)
void moveGridObjectToNewPosition(GridObject, Position)
boolean robotCanMoveToPosition(Robot, Position)
void removeGridObject(GridObject)
void moveRobot(Robot, Direction)
Position getNewPositionFromDirection(GridObject, Direction)
boolean positionHasHole(Position), positionHasFlag(Position)

Player
playerState
ownerLocation
PlayerGraphic P_graphic
programCards
Robot
giveProgramCards(List<Card>)
getProgramCards()
setLocal()
setAI()
setExternal()
playerWon()
isDead()
hasWon()
killPlayer()
getRobot()

GameCommandLine
int CARD_AMOUNT
getValidInput(int)
getLocalCardSequenceInput(List<Card>)
printLocalEnd(boolean)

GameRunner
map
multiple 'layers'
Game game
inputActive
setGameTexture()
giveMapDataToGrid()
setUpGame(Map, int)

CommandLineTool
RRApplication rr_app
GameCommandLine gcl
STRING options for multiple input sequences
NUM_OPTIONS for multiple input sequences - used for getValidInput
getValidInput(int)
commandLineMainMenu()
newGameMenu()
serverSetupMenu()

RRApplication
inputHolder inputHolder
grunner GameRunner
clt CommandLineTool
setUpLibgdxApplication()
getGameRunner()
setUpGame()
getMap()
get

GridObject
Position pos;
Direction orientation;
Position getPosition()
void setPosition(Position)
Direction getOrientation()
Void setOrientation(Direction)

Robot, Flag, Hole, ArchiveMarker
extend GridObject

Robot
extends GridObject
HashSet<Flag> flags
boolean isDead
boolean hasWon
int healthPoints
void setHasWon(boolean)
boolean hasWon()
int getHealth()
void setHealth(int)
void changeHealth(int)
void setisDead(boolean)
boolean isDead()

Flag
extends GridObject
location og orientation
int id
int getid()
void setid()

Hole
extends GridObject

ArchiveMarker
extends GridObject
int id
getId()

CardDealer
Stack<Card> deck
ArrayList<Card> usedCards
Stack<Card> getDeck()
ArrayList<Card> getUsedCards()
Card deal()
void shuffleDeck()
void cardUsed(Card)
List<Card> dealCards(int amount)

CardDeck
Stack<Card> deck
shuffle()
getNextCard()
size()
addRotationCards(deck)
addMoveCards(deck)
generatePriority(int lowerbound, int upperbound)

CardAction(ENUM)
FORWARD
BACKWARD
TURN_RIGHT
TURN_LEFT
TURN_AROUND
getActionName(CardAction action)

Card
int priority;
int getPriority()

CardDeck, StepCard, TurnCard extends Card

CardDeck
Stack<Card> deck

StepCard
int steps

TurnCard
String turnDirection

CardDeck	StepCard	TurnCard
Stack<Card> deck	int steps	String turnDirection
Stack<Card> getDeck()	int getSteps()	String getTurnDirection()
int generatePriority(int, int, int)		