## Actions

TOLERANCE : float

directionToVector(direction, speed) getLegalNeighbors(position, walls) getPossibleActions(config, walls) getSuccessor(position, action) reverseDirection(action) vectorToDirection(vector) Agent

index: int

getAction(state)

AgentState

configuration isPacman numCarrying: int

numReturned: int scaredTimer: int start

copy()
getDirection()
getPosition()

Configuration

direction pos

isInteger()

generateSuccessor(vector)
getDirection()
getPosition()

Directions

EAST: str LEFT: dict NORTH: str REVERSE: dict RIGHT: dict SOUTH: str STOP: str

STOP: str WEST: str

## GameStateData

agentStates: list

capsules food layout score : int

scoreChange: int

copyAgentStates(agentStates)

deepCopy()

initialize(layout, numGhostAgents)

foodfood

## Game

OLD\_STDERR : NoneType OLD\_STDOUT : NoneType

agentCrashed: bool agentOutput

agentTimeout: bool

agents

catchExceptions: bool

display

gameOver: bool moveHistory: list muteAgents: bool numMoves: int

rules

startingIndex : int

state

totalAgentTimeWarnings totalAgentTimes

getProgress() mute(agentIndex) run() unmute() Grid

CELLS\_PER\_INT: int

data height width

asList(key)
copy()
count(item)
deepCopy()
packBits()
shallowCopy()