textDisplay.py (original)

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# textDisplay.py
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# Licensing Information: Please do not distribute or publish solutions to this
# project. You are free to use and extend these projects for educational
# purposes. The Pacman AI projects were developed at UC Berkeley, primarily by
# John DeNero (denero@cs.berkeley.edu) and Dan Klein (klein@cs.berkeley.edu).
# For more info, see http://inst.eecs.berkeley.edu/~cs188/sp09/pacman.html

import pacman, time

DRAW_EVERY = 1
SLEEP_TIME = 0 # This can be overwritten by __init__
DISPLAY_MOVES = False
QUIET = False # Supresses output

class NullGraphics:
  def initialize(self, state, isBlue = False):
    pass

  def update(self, state):
    pass

  def pause(self):
    time.sleep(SLEEP_TIME)

  def draw(self, state):
    print state

  def finish(self):
    pass

class PacmanGraphics:
  def __init__(self, speed=None):
    if speed != None:
      global SLEEP_TIME
      SLEEP_TIME = speed

  def initialize(self, state, isBlue = False):
    self.draw(state)
    self.pause()
    self.turn = 0
    self.agentCounter = 0

  def update(self, state):
    numAgents = len(state.agentStates)
    self.agentCounter = (self.agentCounter + 1) % numAgents
    if self.agentCounter == 0:
      self.turn += 1
      if DISPLAY_MOVES:
        ghosts = [pacman.nearestPoint(state.getGhostPosition(i)) for i in range(1,
numAgents)]
        print "%4d) P: %-8s" % (self.turn,
str(pacman.nearestPoint(state.getPacmanPosition())),'| Score: %-5d' % state.score,'|
Ghosts:', ghosts
      if self.turn % DRAW_EVERY == 0:
        self.draw(state)
        self.pause()
    if state._win or state._lose:
      self.draw(state)

  def pause(self):
    time.sleep(SLEEP_TIME)

  def draw(self, state):
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    print state

  def finish(self):
    pass
```