

pacmanAgents.py ([original](#))

```
# pacmanAgents.py
# -----
# 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

from pacman import Directions
from game import Agent
import random
import game
import util

class LeftTurnAgent(game.Agent):
    "An agent that turns left at every opportunity"

    def getAction(self, state):
        legal = state.getLegalPacmanActions()
        current = state.getPacmanState().configuration.direction
        if current == Directions.STOP: current = Directions.NORTH
        left = Directions.LEFT[current]
        if left in legal: return left
        if current in legal: return current
        if Directions.RIGHT[current] in legal: return Directions.RIGHT[current]
        if Directions.LEFT[current] in legal: return Directions.LEFT[current]
        return Directions.STOP

class GreedyAgent(game.Agent):
    def __init__(self, evaluationFunction):
        self.evaluationFunction = evaluationFunction
        assert self.evaluationFunction != None

    def getAction(self, state):
        # Generate candidate actions
        legal = state.getLegalPacmanActions()
        if Directions.STOP in legal: legal.remove(Directions.STOP)

        successors = [(state.generateSuccessor(0, action), action) for action in legal]
        scored = [(self.evaluationFunction(state), action) for state, action in successors]
        bestScore = max(scored)[0]
        bestActions = [pair[1] for pair in scored if pair[0] == bestScore]
        return random.choice(bestActions)

    def scoreEvaluation(state):
        return state.getScore()
```

Assignment Project Exam Help

<https://eduassistpro.github.io/>

Add WeChat edu_assist_pro