Pacman reflex agent

# Reflex Agent

Reflex agent that evaluates all possible action from the current state and gives a score to that action based on how good that action is

# initial value calculation

In every turn our agent does some initial calculations and makes use of dictionaries to make the new calculated information available in the whole class. Most values are calculated for the initial game state and the state after each of the legal actions pacman can make.

self.pacmanPositions contains pacmans position before and after each legal action

self.ghostDistances contains all the maze distances between pacman and the ghosts, before and after an action of pacman.

self.foodDistances contains all the maze distances between pacman and all food pellets, before and after an action of pacman.

self.ghostSpawns contains all the positions where ghosts spawn and next to where the ghosts spawn. Our agent uses this information to determine if he can eat a ghost without the ghost spawning on top of pacman.

# Score calculation

Maze distance to food.