Team Members

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For Question 7 (Eating all the Dots)

```
└─$ python autograder.py --q q7
Note: due to dependencies, the following tests will be run: q4 q7
Starting on 2-25 at 16:10:35
Question q4
===========
*** PASS: test_cases/q4/astar_0.test
***         solution:               ['Right', 'Down', 'Down']
***         expanded_states:['A', 'B', 'D', 'C', 'G']
*** PASS: test_cases/q4/astar_1_graph_heuristic.test
***         solution:               ['0', '0', '2']
***         expanded_states:['S', 'A', 'D', 'C']
*** PASS: test_cases/q4/astar_2_manhattan.test
***         pacman layout:                  mediumMaze
***         solution length: 68
***         nodes expanded:             221
*** PASS: test_cases/q4/astar_3_goalAtDequeue.test
***         solution:               ['1:A->B', '0:B->C', '0:C->G']
***         expanded_states:['A', 'B', 'C']
*** PASS: test_cases/q4/graph_backtrack.test
***         solution:               ['1:A->C', '0:C->G']
***         expanded_states:['A', 'B', 'C', 'D']
*** PASS: test_cases/q4/graph_manypaths.test
***         solution:               ['1:A->C', '0:C->D', '1:D->F', '0:F->G']
***         expanded_states:['A', 'B1', 'C', 'B2', 'D', 'E1', 'F', 'E2']
### Question q4: 3/3 ###
Question q7
===========
*** PASS: test_cases/q7/food_heuristic_1.test
*** PASS: test_cases/q7/food_heuristic_10.test
*** PASS: test_cases/q7/food_heuristic_11.test
*** PASS: test_cases/q7/food_heuristic_12.test
*** PASS: test_cases/q7/food_heuristic_13.test
*** PASS: test_cases/q7/food_heuristic_14.test
*** PASS: test_cases/q7/food_heuristic_15.test
*** PASS: test_cases/q7/food_heuristic_16.test
*** PASS: test_cases/q7/food_heuristic_17.test
*** PASS: test_cases/q7/food_heuristic_2.test
*** PASS: test_cases/q7/food_heuristic_3.test
*** PASS: test_cases/q7/food_heuristic_4.test
*** PASS: test_cases/q7/food_heuristic_5.test
*** PASS: test_cases/q7/food_heuristic_6.test
*** PASS: test_cases/q7/food_heuristic_7.test
*** PASS: test_cases/q7/food_heuristic_8.test
*** PASS: test_cases/q7/food_heuristic_9.test
*** PASS: test_cases/q7/food_heuristic_grade_tricky.test
***         expanded nodes: 4137
***         thresholds: [15000, 12000, 9000, 7000]
```

```
### Question q7: 5/4 ###
Finished at 16:10:49
Provisional grades
==================
Question q4: 3/3
Question q7: 5/4
------------------
Total: 8/7
Your grades are NOT yet registered.  To register your grades, make sure
to follow your instructor's guidelines to receive credit on your project.
```

Output of results

```
PS E:\MSCS\205\Pac-Man\week 5 & 6\search> python pacman.py -l testSearch -p AStarFoodSearchAgent
Path found with total cost of 7 in 0.0 seconds
Search nodes expanded: 10
Pacman emerges victorious! Score: 513
Average Score: 513.0
Scores:        513.0
Win Rate:      1/1 (1.00)
Record:        Win
```

```
PS E:\MSCS\205\Pac-Man\week 5 & 6\search> python pacman.py -l trickySearch -p AStarFoodSearchAgent
Path found with total cost of 60 in 72.4 seconds
Search nodes expanded: 4137
Pacman emerges victorious! Score: 570
Average Score: 570.0
Scores:        570.0
Win Rate:      1/1 (1.00)
Record:        Win
```

For Question 8 (Sub optimal Search)

```
└─$ python autograder.py --q q8
Starting on 2-25 at 16:11:07
Question q8
===========
[SearchAgent] using function depthFirstSearch
[SearchAgent] using problem type PositionSearchProblem
*** PASS: test_cases/q8/closest_dot_1.test
***        pacman layout:             Test 1
***        solution length:           1
[SearchAgent] using function depthFirstSearch
[SearchAgent] using problem type PositionSearchProblem
*** PASS: test_cases/q8/closest_dot_10.test
***        pacman layout:             Test 10
***        solution length:           1
[SearchAgent] using function depthFirstSearch
[SearchAgent] using problem type PositionSearchProblem
*** PASS: test_cases/q8/closest_dot_11.test
***        pacman layout:             Test 11
***        solution length:           2
[SearchAgent] using function depthFirstSearch
[SearchAgent] using problem type PositionSearchProblem
*** PASS: test_cases/q8/closest_dot_12.test
***        pacman layout:             Test 12
***        solution length:           3
```

```
[SearchAgent] using function depthFirstSearch
[SearchAgent] using problem type PositionSearchProblem
*** PASS: test_cases/q8/closest_dot_13.test
***         pacman layout:              Test 13
***         solution length:            1
[SearchAgent] using function depthFirstSearch
[SearchAgent] using problem type PositionSearchProblem
*** PASS: test_cases/q8/closest_dot_2.test
***         pacman layout:              Test 2
***         solution length:            1
[SearchAgent] using function depthFirstSearch
[SearchAgent] using problem type PositionSearchProblem
*** PASS: test_cases/q8/closest_dot_3.test
***         pacman layout:              Test 3
***         solution length:            1
[SearchAgent] using function depthFirstSearch
[SearchAgent] using problem type PositionSearchProblem
*** PASS: test_cases/q8/closest_dot_4.test
***         pacman layout:              Test 4
***         solution length:            3
[SearchAgent] using function depthFirstSearch
[SearchAgent] using problem type PositionSearchProblem
*** PASS: test_cases/q8/closest_dot_5.test
***         pacman layout:              Test 5
***         solution length:            1
[SearchAgent] using function depthFirstSearch
[SearchAgent] using problem type PositionSearchProblem
*** PASS: test_cases/q8/closest_dot_6.test
***         pacman layout:              Test 6
***         solution length:            2
[SearchAgent] using function depthFirstSearch
[SearchAgent] using problem type PositionSearchProblem
*** PASS: test_cases/q8/closest_dot_7.test
***         pacman layout:              Test 7
***         solution length:            1
[SearchAgent] using function depthFirstSearch
[SearchAgent] using problem type PositionSearchProblem
*** PASS: test_cases/q8/closest_dot_8.test
***         pacman layout:              Test 8
***         solution length:            1
[SearchAgent] using function depthFirstSearch
[SearchAgent] using problem type PositionSearchProblem
*** PASS: test_cases/q8/closest_dot_9.test
***         pacman layout:              Test 9
***         solution length:            1
### Question q8: 3/3 ###
Finished at 16:11:07
Provisional grades
==================
Question q8: 3/3
----------------
Total: 3/3
Your grades are NOT yet registered.  To register your grades, make sure
to follow your instructor's guidelines to receive credit on your project.
```

```
PS E:\MSCS\205\Pac-Man\week 5 & 6\search> python pacman.py -l bigSearch -p ClosestDotSearchAgent -z .5
[SearchAgent] using function depthFirstSearch
[SearchAgent] using problem type PositionSearchProblem
Path found with cost 350.
Pacman emerges victorious! Score: 2360
Average Score: 2360.0
Scores:        2360.0
Win Rate:      1/1 (1.00)
Record:        Win
```