# Pacman Project 2 Search

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- Layouts
- Objectives
- Grading

## Layouts

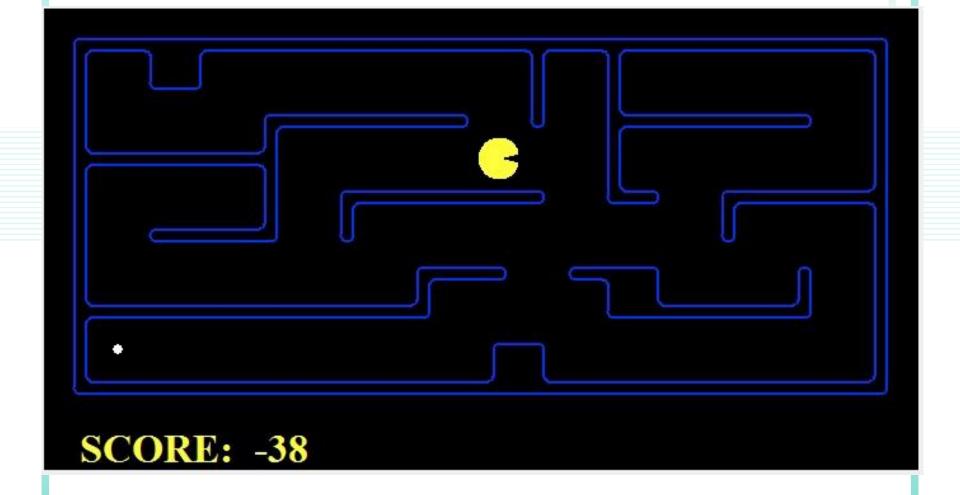
- tinyMaze
- smallMaze
- mediumMaze
- bigMaze

# Layouts (1/4) tinyMaze

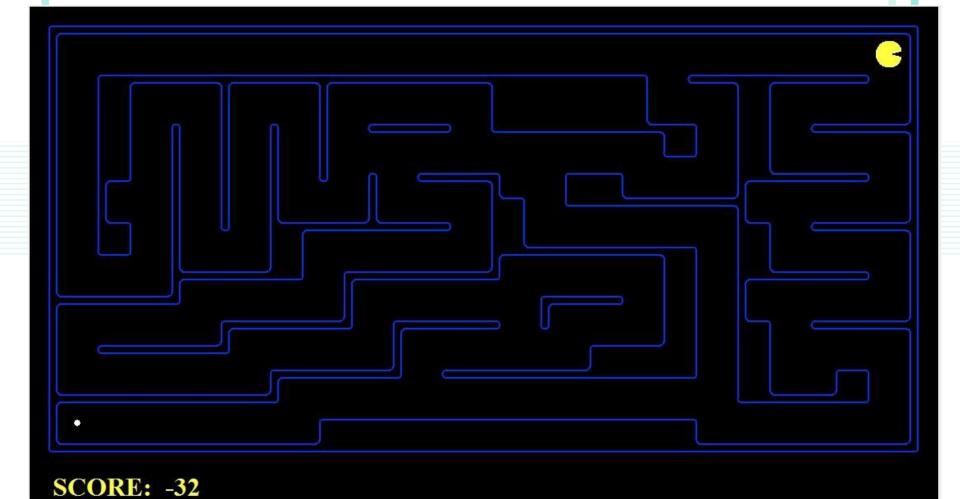
-I tinyMaze



## Layouts (2/4) smallMaze



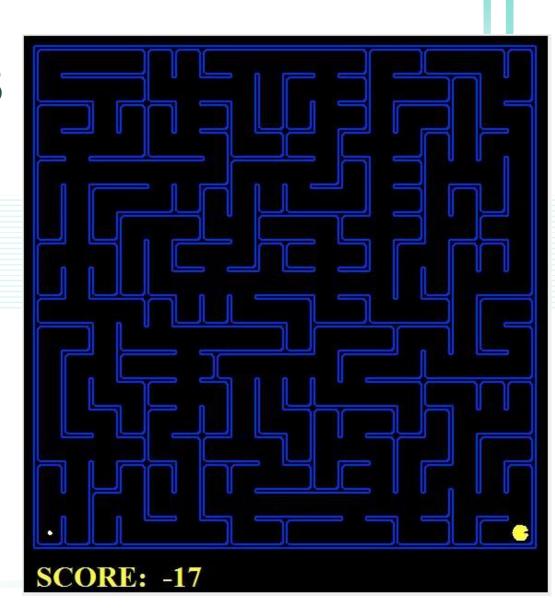
## Layouts (3/4) mediumMaze



#### Layouts (4/4)

## bigMaze

• -I bigMaze -z 0.5



## Objectives

- P2-1 Depth-First Search (DFS)
- P2-2 Breadth-First Search (BFS)
- P2-3 A\* Search

#### Objectives (1/3)

## **Depth-First Search (DFS)**

- 35%
- python pacman.py
  - -I mediumMaze
  - -p SearchAgent
  - -a fn=dfs

#### Objectives (2/3)

## **Breadth-First Search (BFS)**

- 35%
- python pacman.py
  - -I mediumMaze
  - -p SearchAgent
  - -a fn=bfs

#### Objectives (3/3)

#### A\* Search

- 30%
- python pacman.py
  - -I mediumMaze
  - -p SearchAgent
  - -a fn=astar,heuristic=manhattanHeuristic

## Grading

- Edit and upload search.py (P2\_##.zip)
- Search for "[Project 2] YOUR CODE HERE"
- Deadline: 4/13 23:59 (3 weeks)
- Late Policy: 80%

#### Hints

- DFS / mediumMaze
  - $-\cos t = 130$ , nodes = 146
- Use the data structures in util.py.
- Use print to understand everything.

#### **Contacts**

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