

Class Design



Understanding the problem

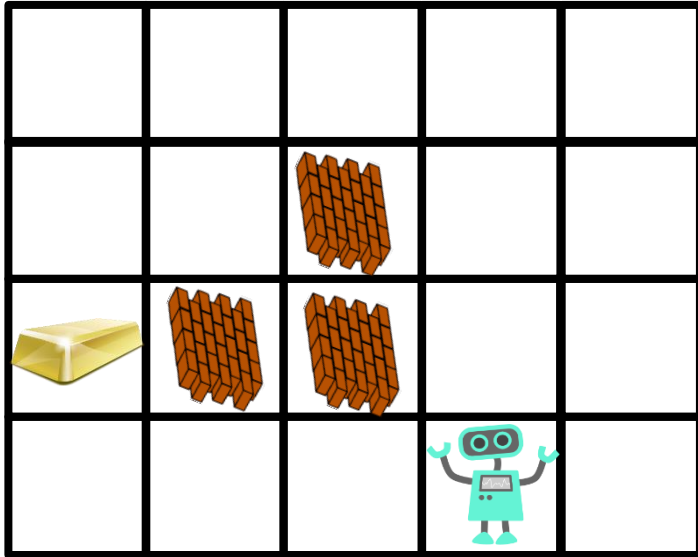


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By the end of this video you will be able to...

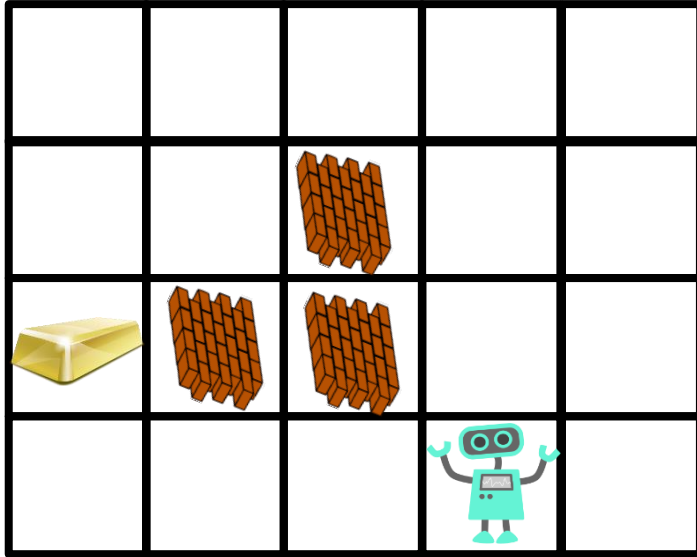
- Describe how a 2D maze is represented as a graph

An A-Maze-ing graph problem



Goal: Find a path to the gold

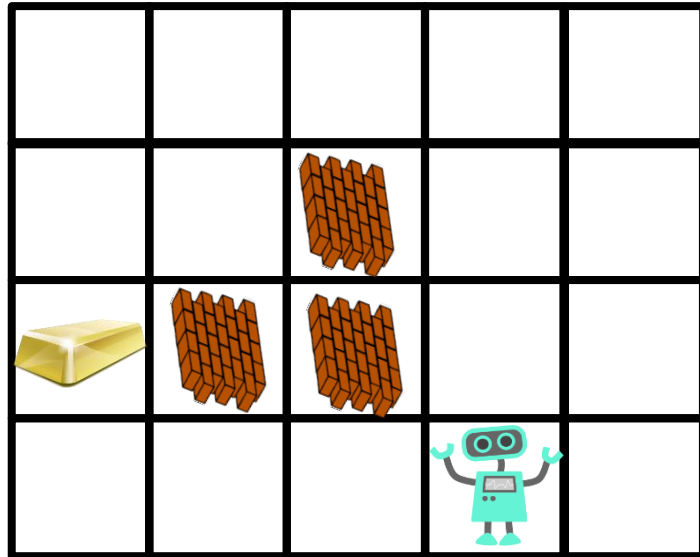
This is a graph problem!



We will use this example to...

- 1. Represent this problem as a graph**
- 2. Explore basic graph search algorithms**
- 3. Build a graph representation* in Java**

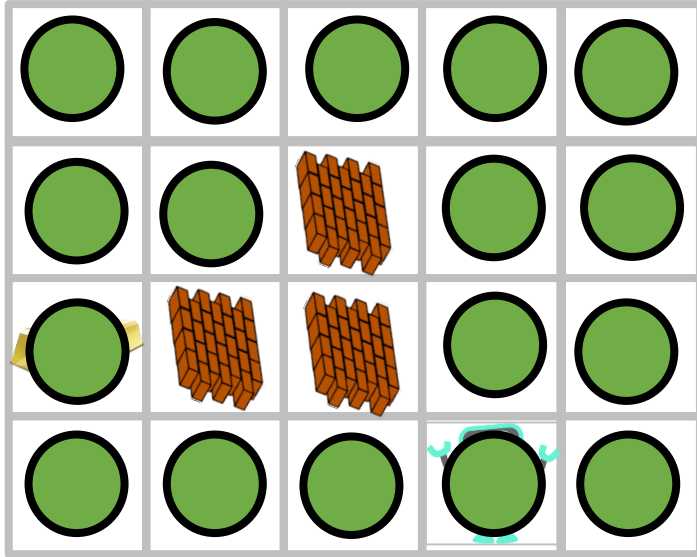
*** WARNING: THIS REPRESENTATION IS NOT THE SAME AS YOUR PROJECT**



A graph has...

**Vertices
(Nodes)**

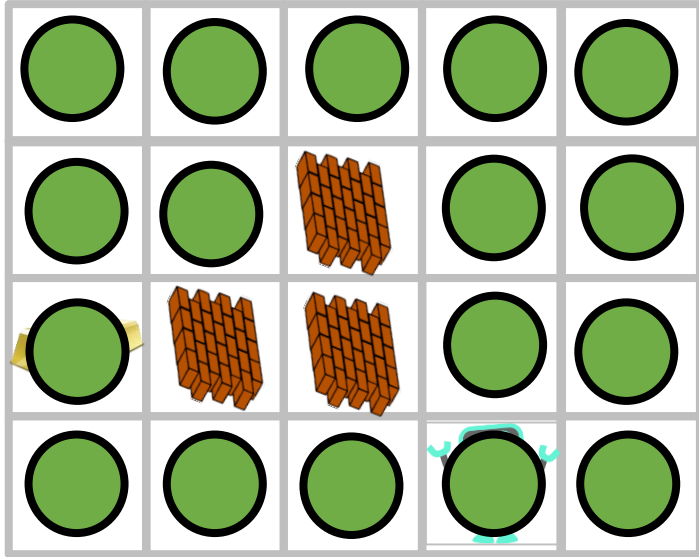
Edges



A graph has...

Vertices

One node for each location the robot can be in

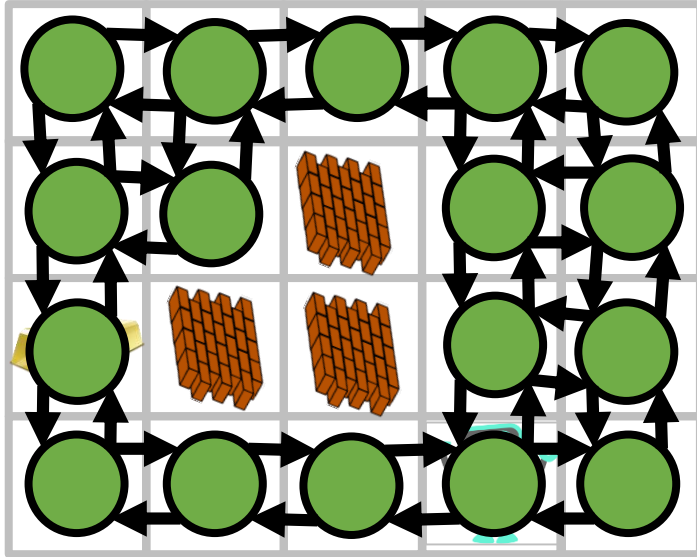


A graph has...

Vertices

Edges

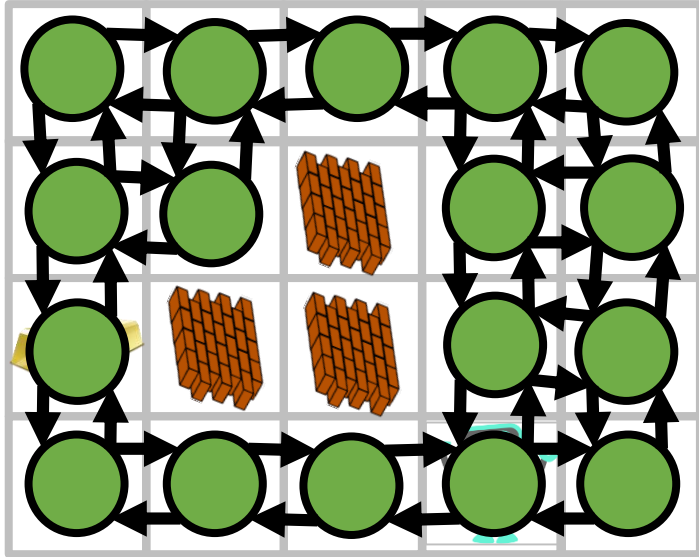
One edge for "hop" the robot can take



A graph has...

Vertices

Edges



**Next up:
Searching for Gold**