BUILD YOUR ROBOT WORLD IN JAVA

https://www.educative.io/courses/hour-of-code-build-your-robot-world-in-java/m2Y3Bko1vor

MOVING THE ROBOT

STEP 1:
- Press Run
- Robot moves one box to right: “east”

STEP 2:
- Click mouse at end of Line 18
- Press Enter
- Drag mouse to select maze.turn();
- Press CTRL C to copy
- Click on Line 19
- Press CTRL V to paste
- Click at end of Line 19
- Press Enter
- Drag mouse to select robbie.setDirection(“east”)
- Press CTRL C to copy
- Click on Line 20
- Press CTRL V to paste
- Change “east” to “south”
- Robot moves one box down: “south”

STEP 3:
- Click mouse at end of Line 20
- Press Enter
- Drag mouse to select maze.turn();
- Press CTRL C to copy
- Click on Line 21
- Press CTRL V to paste
- Click at end of Line 21
- Press Enter
- Drag mouse to select robbie.setDirection(“east”)
- Press CTRL C to copy
- Click on Line 22
- Press CTRL V to paste
- Change “east” to “west”
- Robot moves one box left: “west”
STEP 4:

- Click mouse at end of Line 22
- Press Enter
- Drag mouse to select maze.turn();
- Press CTRL C to copy
- Click on Line 23
- Press CTRL V to paste
- Click at end of Line 23
- Press Enter
- Drag mouse to select robbie.setDirection("east")
- Press CTRL C to copy
- Click on Line 24
- Press CTRL V to paste
- Change "east" to "north"
- Robot moves up ("north") one box to start position
BUILDING THE LABYRINTH

STEP 1:
• Click mouse at beginning of Line 17
• Press Enter
• Click mouse at Beginning of Line 17
• On Line 17 type: // add several walls
• Click Enter
• On Line 18 type: maze.add(new Wall(2.0, 2.0));
• Click mouse at end of Line 19
• Click Enter
• On Line 20 type: maze.add(new Wall(2.0, 3.0));
• Click mouse at end of Line 20
• Click Enter
• On Line 21 type: maze.add(new Wall(3.0, 3.0));
• Click Run
• You have now created a 4 box wall:

```
// add several walls
maze.add(new Wall(2.0, 2.0));
maze.add(new Wall(3.0, 2.0));
maze.add(new Wall(2.0, 3.0));
maze.add(new Wall(3.0, 3.0));
```

STEP 2: ADDING MORE BOXES
• Click mouse at end of Line 22
• Click Enter
• Click Enter again
• On Line 23, type: Type: maze.add(new Wall(5.0, 2.0));
• Click mouse at end of Line 23
• Click Enter
• On Line 24 type: maze.add(new Wall(5.0, 3.0));
• Click mouse at end of Line 24
• On Line 25 type: maze.add(new Wall(5.0, 4.0));
• Click Run
• You have now created a 3 box wall:

```
// add several walls
maze.add(new Wall(2.0, 2.0));
maze.add(new Wall(3.0, 2.0));
maze.add(new Wall(2.0, 3.0));
maze.add(new Wall(3.0, 3.0));
maze.add(new Wall(5.0, 2.0));
maze.add(new Wall(5.0, 3.0));
maze.add(new Wall(5.0, 4.0));
```
ADDING CREATURES TO YOUR MAZE

STEP 1:
• Click mouse at the end of Line 8
• Press Enter
• On Line 9 type: Robot tiktok;

STEP 2:
• Click Mouse at the end of Line 14
• Click Enter
• On Line 14 type: tiktok = new Robot(4.0, 3.0, “yellow”);
• Click Enter at end of Line 15
• Click Enter at end of Line 18
• On Line 19 type: maze.add(tiktok);
• Click Run
• You have now added a second, yellow robot

```java
public static void main(String[] args) {
    // set up variables to store the robot and the maze
    Robot robbie;
    Robot tiktok;
    Maze maze;

    // create the robot and maze, and add
    // the robot to the maze
    robbie = new Robot(0.0, 0.0, "red");
    tiktok = new Robot(4.0, 3.0, "yellow");

    maze = new Maze(8, 8, 50);
    maze.add(robbie);
    maze.add(tiktok);
```
DRIVE THE ROBOTS AROUND THE LABYRINTH

STEP 1:
- Drag the mouse over the text in Line 31 to select
- On Line 31 type: // drive the robots around
- Click mouse at the end of Line 32
- Click Enter
- On Line 33 type: maze.turn();
- Click at the end of Line 33
- Click mouse at the end of Line 33
- Click Enter
- On Line 34 type: maze.turn();
- Click mouse at the end of Line 34
- Click Enter
- On Line 35 type: maze.turn();
- Click mouse at the end of Line 35
- Click Enter
- On line 36: type maze.turn();

STEP 2:
- Click mouse at the end of Line 36
- Click Enter
- On Line 37 Click Enter
- On Line 38: type robbie.setVelocity(0.0, 1.0);
- Click mouse at the end of Line 38
- Click Enter
- On Line 39: type tiktok.setVelocity(0.0, 1,0);
- Click mouse at the end of Line 39
- Click Enter
- On Line 40: type maze.turn();

STEP 3:
- Click mouse at the end of Line 40
- Click Enter
- On Line 41 click Enter
- On Line 42 type: tiktok.setVelocity(-1.0, 0,0);
- Click at the end of Line 42
- Click Enter
- On Line 43 type: maze.turn();
- Click mouse at the end of Line 43
- Click Enter
- On Line 44 type: maze.turn();
• Click mouse at the end of Line 44
• Click Enter
• On Line 45 type: maze.turn();

STEP 4:
• Click at the end of Line 45
• Click Enter
• On Line 46 click Enter
• On Line 47 type: tiktok.setVelocity(0.0, -1.0);
• Click at the end of Line 47
• Click Enter
• On Line 48 type: robbie.setVelocity(-1.0, 0.0);
• Click at the end of Line 48
• Click Enter
• On Line 49 type: maze.turn();
• Click at the end of Line 49
• Click Enter
• On Line 50 type: maze.turn();
• Click at the end of Line 50
• Click Enter
• On Line 51 type: maze.turn();
• Delete lines to move curly brackets to Lines 53 and 54
• Click Run
• The red robot, Robbie, should be chasing the Yellow Robot, Tiktok, through the labyrinth

// drive the robots around
robbie.setVelocity(1.0, 0.0);
maze.turn();
maze.turn();
maze.turn();
maze.turn();
robbie.setVelocity(0.0, 1.0);
tiktok.setVelocity(0.0, 1.0);
maze.turn();
tiktok.setVelocity(-1.0, 0.0);
maze.turn();
maze.turn();
maze.turn();
tiktok.setVelocity(0.0, -1.0);
robbie.setVelocity(-1.0, 0.0);
maze.turn();
maze.turn();
maze.turn();