

The Robot

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Topics

Intro: Why, oh why? Unit 3000-21...

Part I: Mr. Roboto on Paper

Part II: Mr. Roboto Online

Part III: Show me the money...er...the code!

Closing: Uhm...pardon me...

Why Teach This?

Why Teach Coding?

- See Mindy Slaughter
- <http://www.mindyslaughter.com/>
- [The Guitar and the Smartphone](#)



Part I: Paper Version

The Robot

- Work in Pairs
- Get the energy
- Get the robot home
- Record your commands

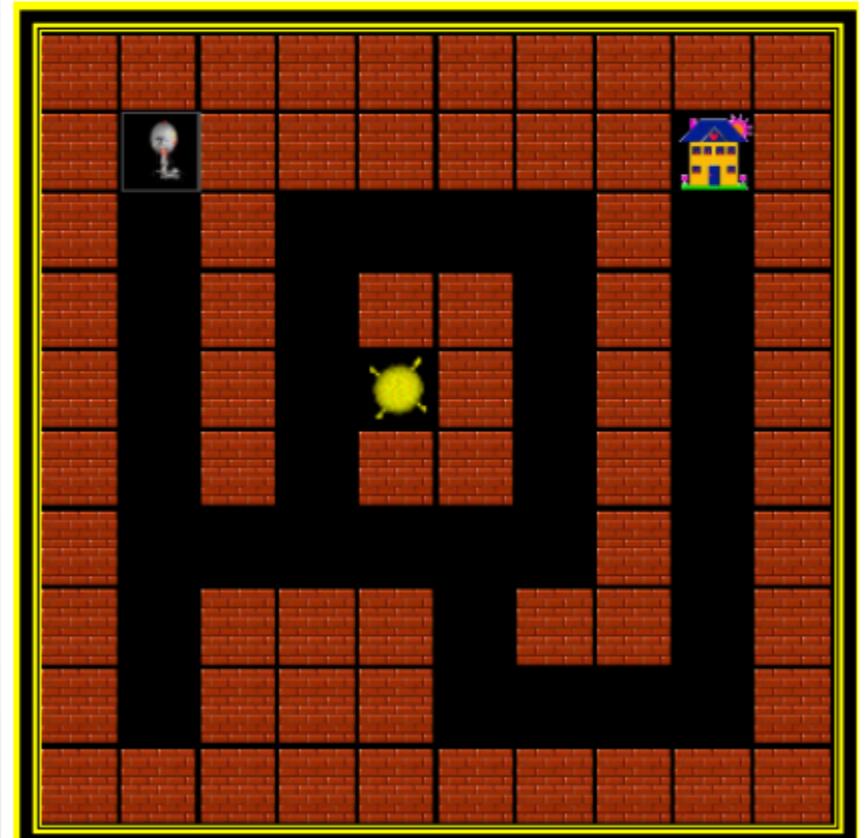
Introduction to Programming: *The Robot*

Made By: *Mr. Thompson*

Your job is to get the robot to his home (🏠).

But first, you have to stop and get him some energy (⚡) for his wife and children.

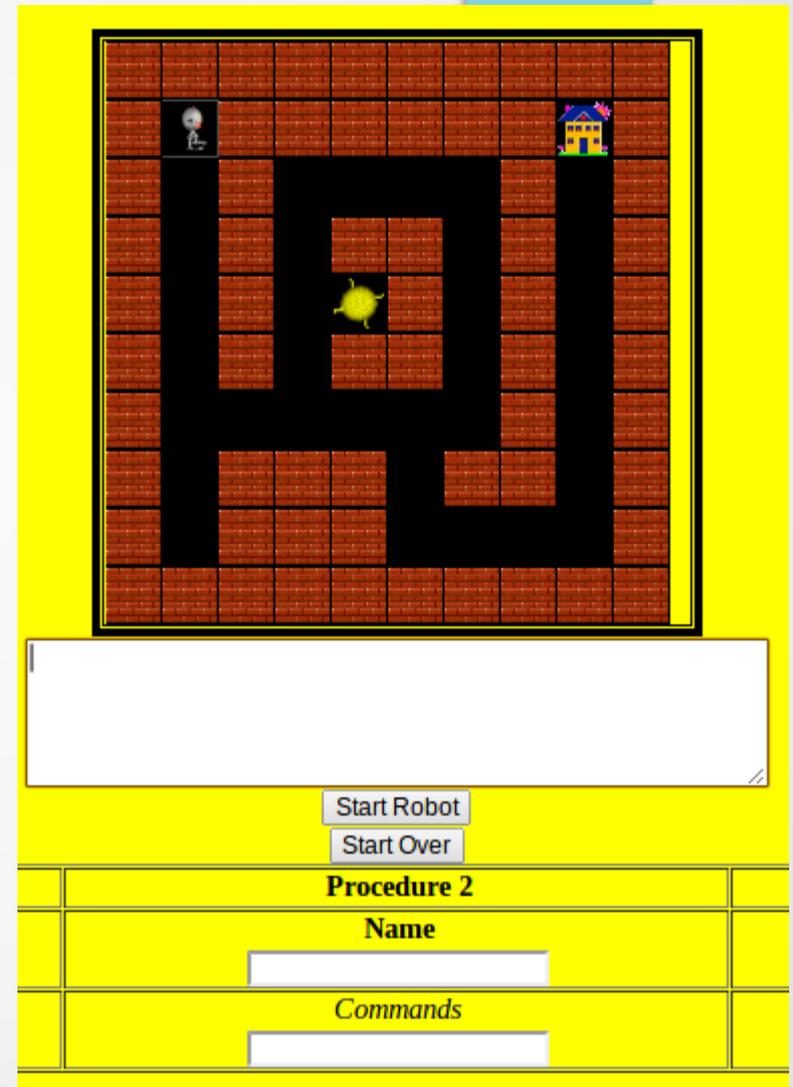
You can use the basic commands, "fd", "rt", and "gt". Good luck!



Part II: Web Version

The Robot

- Try it online
- One person enter
- One person read
- Don't forget commas!



- www.christianthompson.com/node/31

Part III: Customize It

- <http://jsbin.com/>
- Background Color / Maze / Locations / Etc.

```
</center>
<script type="text/javascript" language="JavaScript">
//Initial Values
//direction rt, dn, lt, up
var direction = "";
var currentLocation=0;
var newLocation=currentLocation;
var energyLocation=0;
var robotDesign="";
var homeLocation=0;
var finished=false;
var gotEnergy=false;
var delayTime=250;
var numberOfCommands=0;
//This prevents the timer from activating early
var timer=setTimeout("moveRobot();",10000000);

//
//
//THIS MUST BE CHANGED TO MAKE A NEW MAZE
//
//
var wallArray = new Array(0, 1,2,3,4,5,6,7,8,9, 12, 13, 14, 15, 16, 17, 22, 27, 32,
34, 35, 37, 42, 45, 47, 52, 54, 55, 57, 67, 72, 73, 74, 76, 77, 82, 83, 84, 10, 20,
30, 40, 50, 60, 70, 80, 90, 19, 29, 39, 49, 59, 69, 79, 89, 99, 91, 92, 93, 94, 95,
96, 97, 98);
//
//DONT'T CHANGE ANYTHING ELSE
//
//
resetAll();

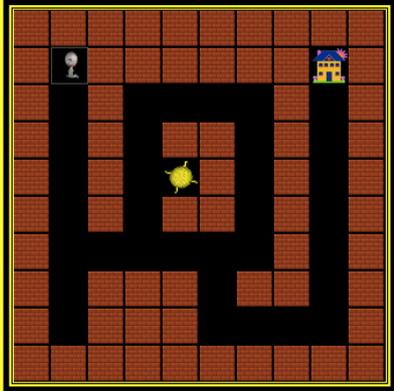
function resetAll(){
//
//
//THESE CAN BE CHANGED TO MAKE A NEW MAZE
//
//direction rt, dn, lt, up
direction = "rt";
currentLocation=11;
homeLocation=18;
```

Output Run with JS Auto-run JS

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Thank you

Please feel free to contact me if you have any questions.

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