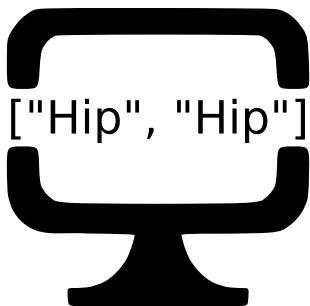


AMAZING MAZE

Vincent Macri Chloe Nguyen
Susie Son



©2017 Hip Hip Array

Contents

1	The Story	1
2	Main Menu	3
3	Settings	5
4	Maze	9
4.1	Maze Screen	9
4.2	Goal	10
4.3	AND Gate	11
4.4	NAND Gate	11
4.5	OR Gate	12
4.6	NOR Gate	12
4.7	XOR Gate	13
4.8	Interacting with Gates	13
4.9	Items	14
4.9.1	Fish	14
4.9.2	Cheese	14
5	Counting Points	15
5.1	Controls	16
5.2	Scoring	16

The Story

You are the world's best ICS teacher, Ms. Krasteva. As a thank you gift for an amazing year of teaching, your students bought you a coffee. But when you drink the coffee, you start to feel funny.

When you get home, you turn on your TV, and start to watch the news. They are running a story on a coffee recall! Due to horrible quality control, coffee from Starbucks is turning people sick. But not just a normal kind of sick. It is turning them into mice!

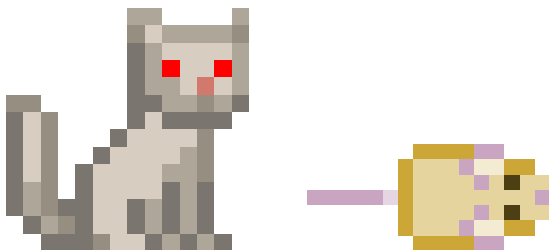
You see the world around you getting bigger, but it isn't. Ms. Krasteva is turning into Mouse Krasteva!

The news wrapped up the story by mentioning that the company "Hip Hip Array" is testing an antidote. However, you do not have time to wait for this antidote, because you

need to mark the fantastic ISPs your students have poured the last month of their lives into in an effort to get 100

You take it upon yourself to break into the lab and steal the antidote because mice are unable to use computer mice.

Unfortunately for you, the lab has a high-tech security system of boolean algebra mazes and cat security guards, meaning that you have to avoid getting electrocuted while collecting fish to bribe the cats to not to eat you.



Main Menu

The menu provides you with a few options:

Play Click this button to play the game.
The game will continue from where you left off.

Help Click this button to learn how to play the game.

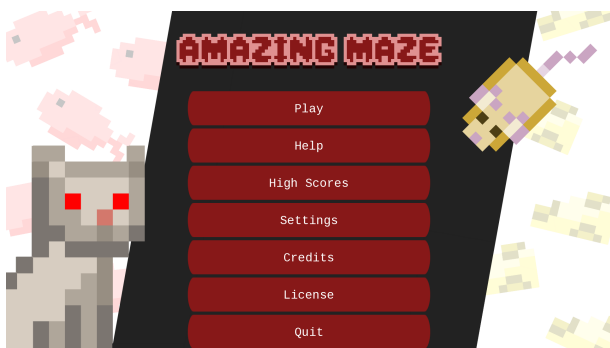
High Scores Click this button to see the high scores.

Settings Click this button to change the game settings.

Credits Click this button to see the game credits.

License Click this button to view the copyright notice.

Quit Click this button to close the game.



Settings

On the settings menu, you are able to:

- Adjust the volume level
- Toggle fullscreen mode
- Change the controls
- Reset the settings, save, or everything

Settings

Music Volume



Controls

Up

Up

Down

Down

Left

Left

Right

Right

Escape

Pause

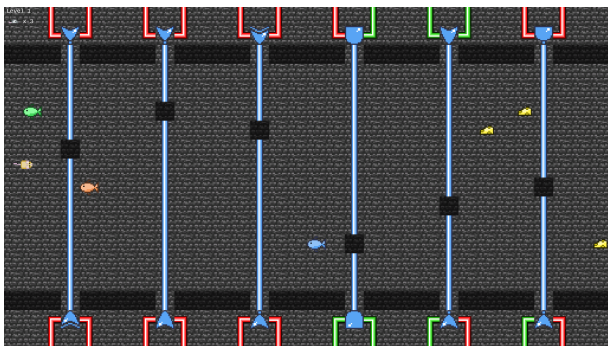
Reset Settings

Reset Save

Back

Maze

4.1 Maze Screen



Here we see the mouse (on the left, in the middle of the screen) at the start of a new level.

In the top left, we see that the player has three lives remaining.

4.2 Goal

In the maze, you must navigate through logic gates.

Each gate has two inputs, and one output.

Green is on, or true.

Red is off, or false.

Blue is unknown.



An on wire.



An off wire.



An unknown
wire.

The two inputs will always be known, and *you* will always need to determine the output.

You will be working with AND, NAND, OR, NOR, and XOR gates.

4.3 AND Gate

An AND gate is on only if both of its inputs are on.

Input A	Input B	Output
OFF	OFF	OFF
OFF	ON	OFF
ON	OFF	OFF
ON	ON	ON



4.4 NAND Gate

A NAND gate's output is the opposite of an AND gate's with the same inputs. It is a *not* AND gate.

Input A	Input B	Output
OFF	OFF	ON
OFF	ON	ON
ON	OFF	ON
ON	ON	OFF



4.5 OR Gate

An OR gate is on if at least of its inputs are on.

Input A	Input B	Output
OFF	OFF	OFF
OFF	ON	ON
ON	OFF	ON
ON	ON	ON



4.6 NOR Gate

A NOR gate's output is the opposite of an OR gate's with the same inputs. It is a *not* OR gate.

Input A	Input B	Output
OFF	OFF	ON
OFF	ON	OFF
ON	OFF	OFF
ON	ON	OFF



4.7 XOR Gate

An XOR gate is on if only one of its inputs are on.

Input A	Input B	Output
OFF	OFF	OFF
OFF	ON	ON
ON	OFF	ON
ON	ON	OFF



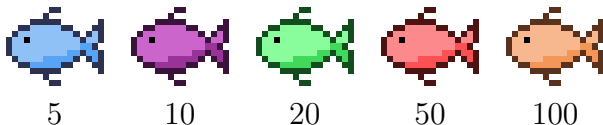
4.8 Interacting with Gates

The goal of this game is to reach the right side of the map without touching any wires that are on. While not necessary, you make click on the gates to mark them with what you think their output is. Left click a gate to mark it as on. Right click a gate to mark it as off. Middle click a gate to mark it as unknown.

4.9 Items

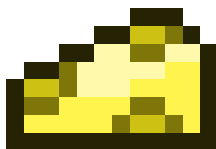
4.9.1 Fish

There are 5 fish you can collect in the game, each worth a different amount of points corresponding to Canadian money. Collecting these fish is what gets you points.



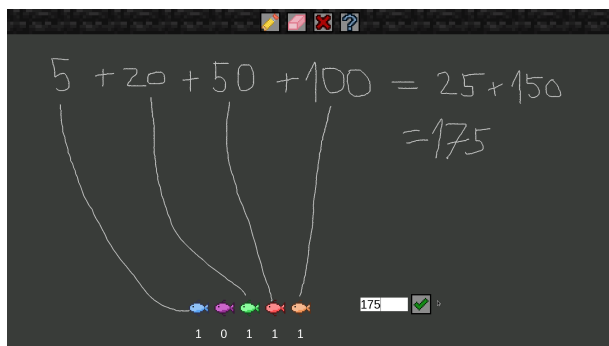
4.9.2 Cheese

Because you are a mouse, cheese is incredibly healthy. Eating cheese will give you more lives.



Counting Points



You count your points manually. A sketchpad is provided for you to do your work on.




This example shows how you might count up your score on the screen and input the answer.


The closer you are to the correct answer, the more points you will get. There is a help button on this screen which reminds you how many points each item is worth.

5.1 Controls

Click  to enter drawing mode. Click  to enter erasing mode. The screen starts in drawing mode.

If you make a big mistake, click  to erase everything.

Once you think you have the correct answer, click  to submit it.

If you forget how this part of the game works, click  for a reminder of the rules.

5.2 Scoring

If you count your score correctly, you get all of the points. If you are off by 1-5, you get 70% of the points. If you are off by 6-15, you get 50% of the points. If you are off by more than 15, you get 15% of the points.