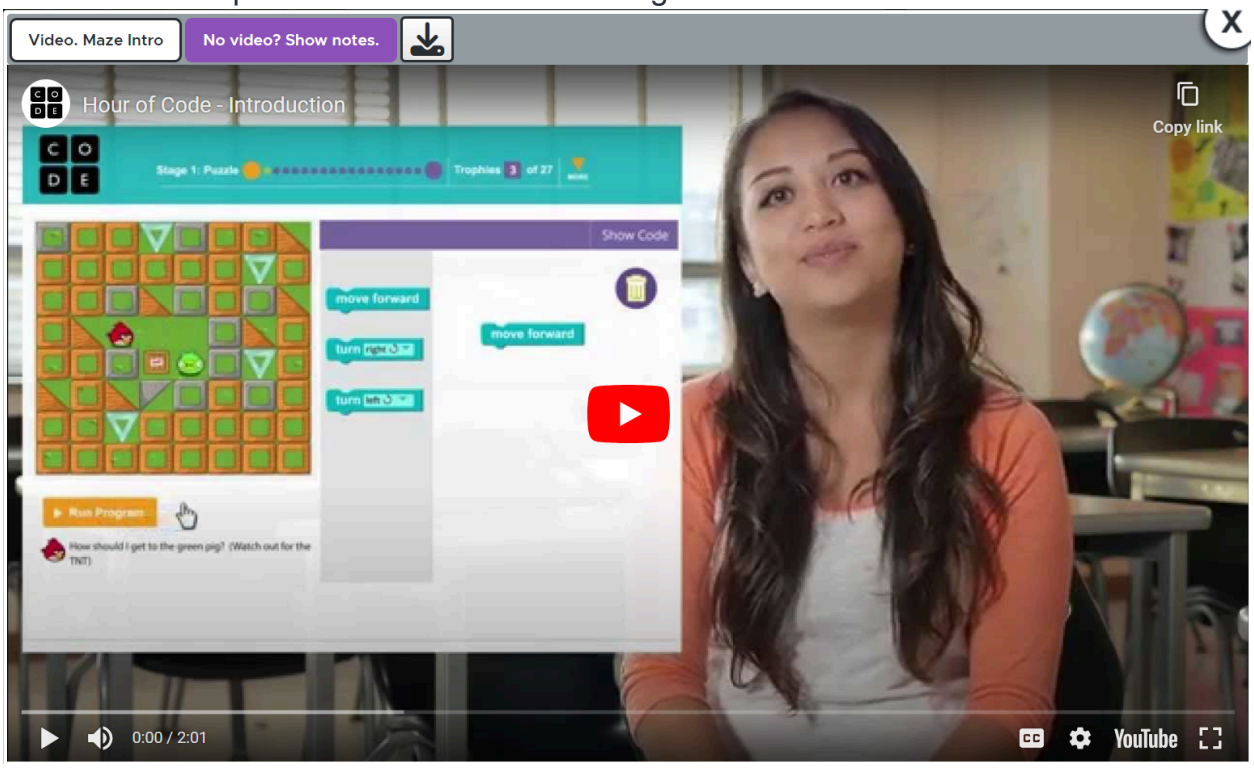
Classic Maze | Teachers Guide

Overview

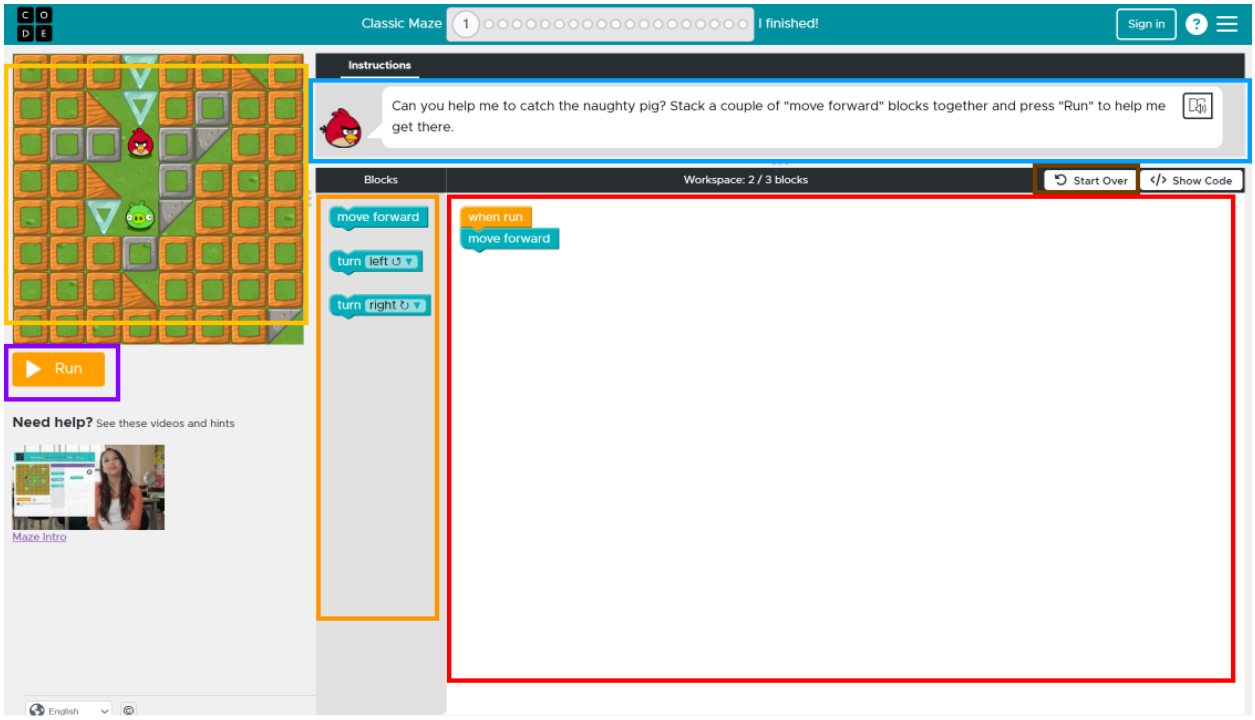
Use drag-and-drop programming to make your own Maze game.
Link to the activity: https://studio.code.org/hoc/1

Jumping into the activity

- Once students have clicked the link that has been provided, they will have to watch a quick 2 minute intro about the game.



- Now let's get your students to know the interface in front of them, colors have been labeled on each component of the screen.



- Blue is for the instructions for that specific question.
- Orange is for the blocks of code that your students will be using.
- Red is for the workspace where the block of code can be dragged to.
- Brown is to erase all the work and start the activity.
- Purple is for the run button where students can test out their blocks of code to see if it works.
- Yellow is for the game interface where students can see their blocks of code in action.

Answer Key to each question of this activity

- **Question 1**
  Can you help me to catch the naughty pig? Stack a couple of "move forward" blocks together and press "Run" to help me get there.

- **Question 2**

This pig is ruffling my feathers. Help me to find him!

- **Question 3**

  Trace the path and lead me to the silly pig. Avoid TNT or the feathers will fly!

- **Question 4**

  Guide me to the green evilness! (Watch out for TNT)

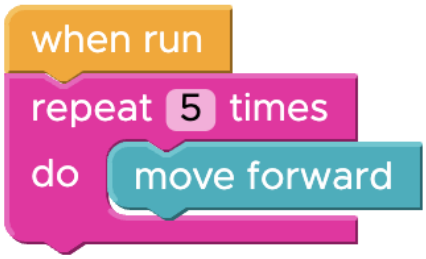
- **Question 5**

  Keep calm and help me to find the bad pig. Otherwise I might get angry!

When students click continue after question 6, there will be a video of Mark Zuckerburg teaching about repeated loops.

- **Question 6**

  There's a way I can get to the silly pig using only 2 blocks. Can you figure it out?



- **Question 7**

  Try to get me to the green intruder using only three blocks.

- **Question 8**

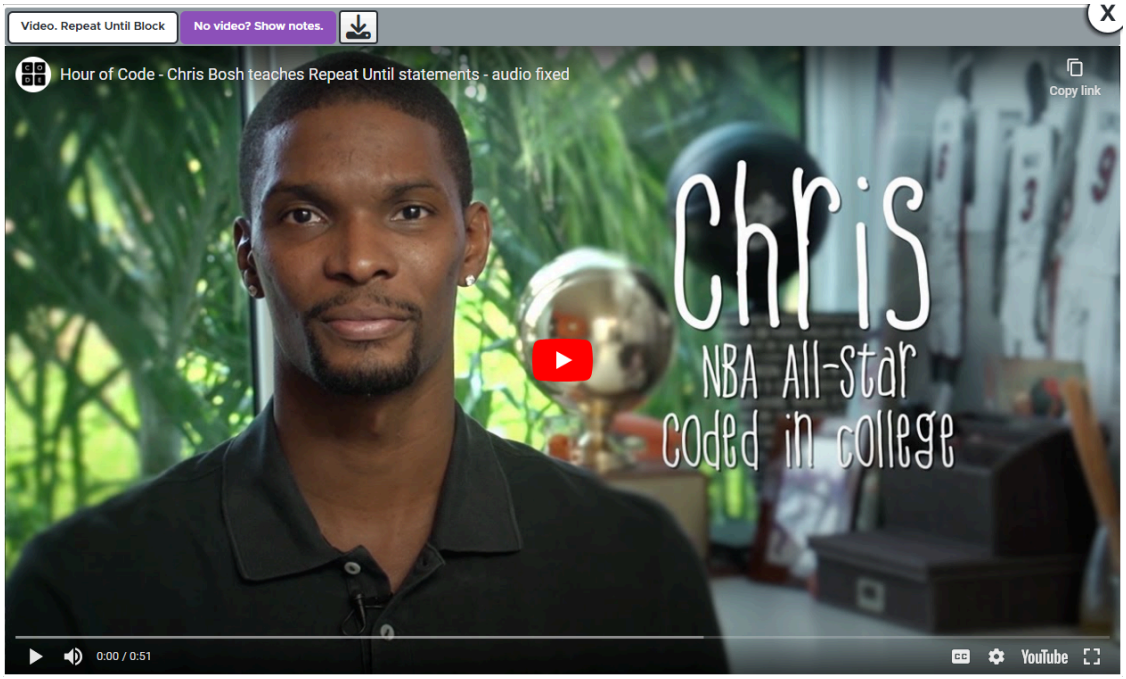
  Help me banish this bad piggy using the fewest number of blocks.

  Try using more than one "repeat times" block. Note: you might need to change the number of times to repeat.

- **Question 9**

  When a block is grey, that means you can't delete it. Solve this puzzle using the "repeat" block that repeats 3 times. Try putting these 3 blocks inside the grey "repeat" block: move, move, turn.

When students click continue after question 9, there will be a video of Chris Bosh teaching about repeat until statements.



- **Question 10**

  This time we will use the “repeat until” box that will stop when we reach the pig.

- **Question 11**

  Can you use the “repeat until” box with only 4 blocks?

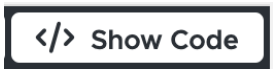
- **Question 12**

  Use the “repeat until” box to get the zombie to the sunflower. Can you find the pattern?

- **Question 13**

  Do it again in a different direction. Don't eat the poisonous plant.

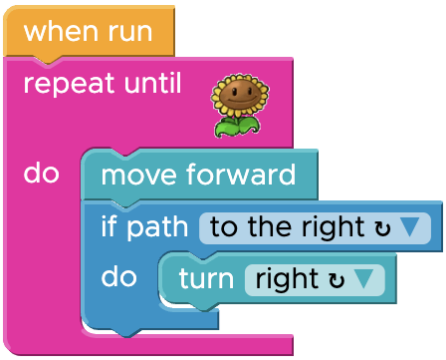
- **Question 14**

  Use the new "if" block to decide when to turn. You can also use the 

button to see the actual code you are building.

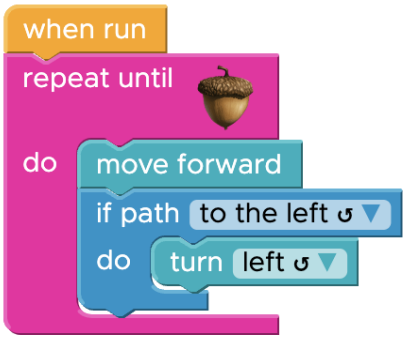
- **Question 15**

  Try the if block on your own for this one.



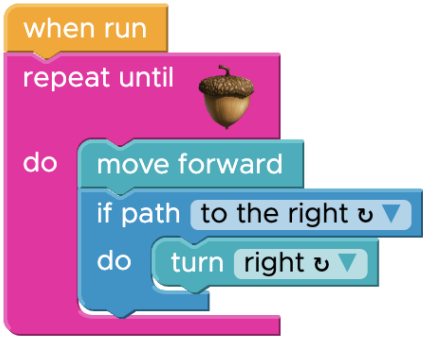
- **Question 16**

  Use the “if” block to get the squirrel to the acorn.

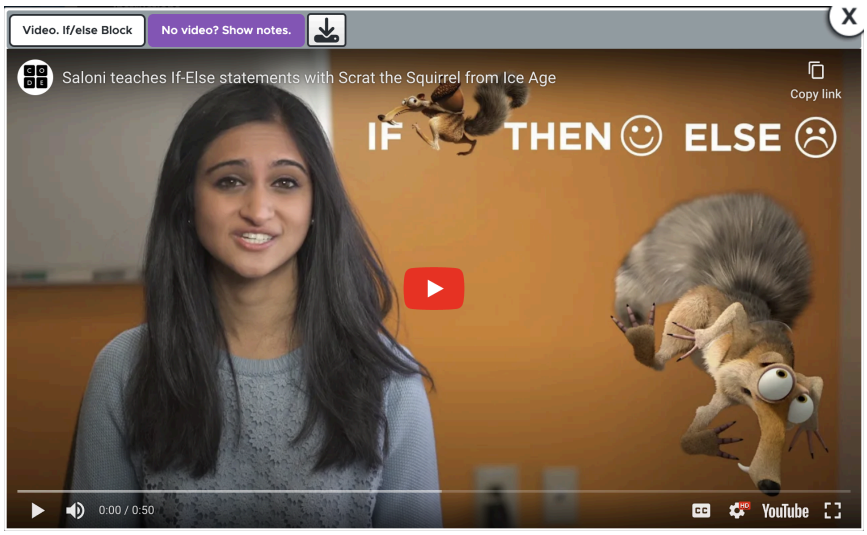


- **Question 17**

  Try it again, but pay attention to which way you need to turn.

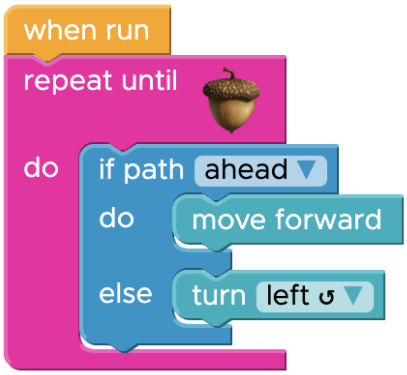


  When students click continue after question 17, there will be a video of Saloni teaching about if-else statements.



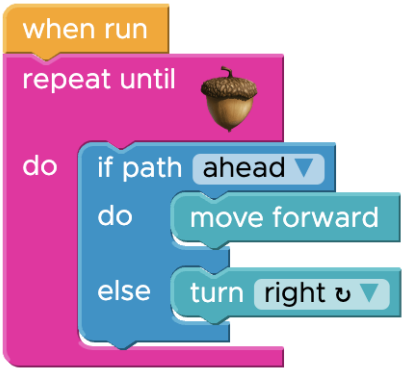
- **Question 18**

  Use the “if-else” block to get the squirrel to the acorn.



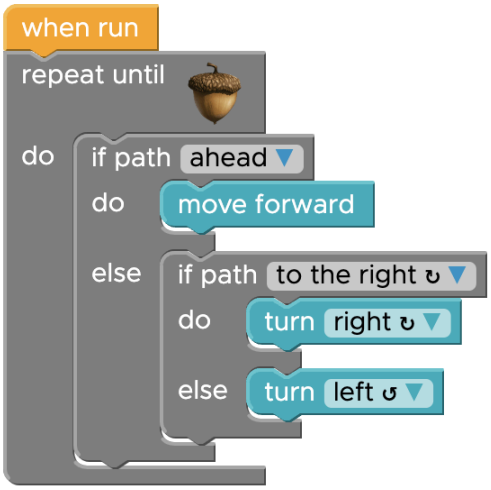
- **Question 19**

  Try it again.



- **Question 20**

  Can you add just 3 blocks to complete a more complicated maze?



Bobak wraps up the activities showing how this code can be used like on the Mars Rover.