

# Maze Game (Modifications 2)

## 1. Keys & Gates

- a. Create a sprite for an extra piece of maze wall using the paint tool.
- b. Place your wall sprite across one of your maze corridors to block your exit.
- c. Choose or create a 'key' sprite and place it somewhere in the maze.
- d. Write some code to hide the wall sprite when you collect the key.
- e. Write some code to set the wall position & orientation at the start of the game.
- f. Make the wall sprite behave like a gate by making it rotate by 90 degrees.  
(HINT: gates rotate around their edge. By default, Scratch sprites will rotate around their centre point. You can change this in the Scratch paint tool)
- g. 'Animate' the gate rotation.  
(HINT: try using a number of smaller rotation steps, with short pauses in between, rather than a single 90 degree rotation).

## 2. Moving Enemies

- a. Choose or make an enemy sprite. Place this somewhere in your maze.
- b. Write some code that makes the enemy continually patrol across the screen.  
(for simplicity, you can ignore the maze walls at this point)
- c. Change your code to make the enemy turn whenever it hits a maze wall.  
(HINT: you have already written 'wall detection' code for your own character)

## 3. Obstacles & Gravity

- a. Choose or create a sprite that represents an obstacle that can be pushed.
- b. Write some code that moves the object away from you whenever it is pushed.  
(HINT: <touching [sprite]> and <broadcast> are your friends)
- c. Write some code that gives this obstacle "gravity".  
(HINT: gravity makes objects continually fall until they hit the floor)
- d. Test your code by pushing your object over a gap in the 'floor'. Does it fall?

## 4. Sound & Graphics

- a. Create/choose sound effects for movement, object collection, death & finish.
- b. Add a music soundtrack to the game (you can ask for some sample music).
- c. Write some code to change the music when you reach the end of the game.
- d. Import or select a background image to draw your maze on top of.
- e. Create your own game characters & sprites (use Inkscape/Scratch paint).