

User Manual

1. Introduction

- 1.1. Purpose – This documentation was created by Lilianna Rosales and Abel Abarca to explain how to run our program properly.
- 1.2. Definitions, Acronyms or Abbreviations – None at this time.

2. Hardware Configuration

- 2.1. Any hardware running macOS, Windows, Android, Raspberry Pi, and many other Linux platforms.

3. System Parameters

- 3.1. Please download and install Processing from <https://processing.org/download>

4. Operation Procedure

- 4.1. Open the source code file.
- 4.2. Open “MazeGenerator.pde” with Processing.
- 4.3. Ensure that the GifAnimation Library is downloaded.

- 4.3.1. Click “Sketch” in the option (Figure 1.1)

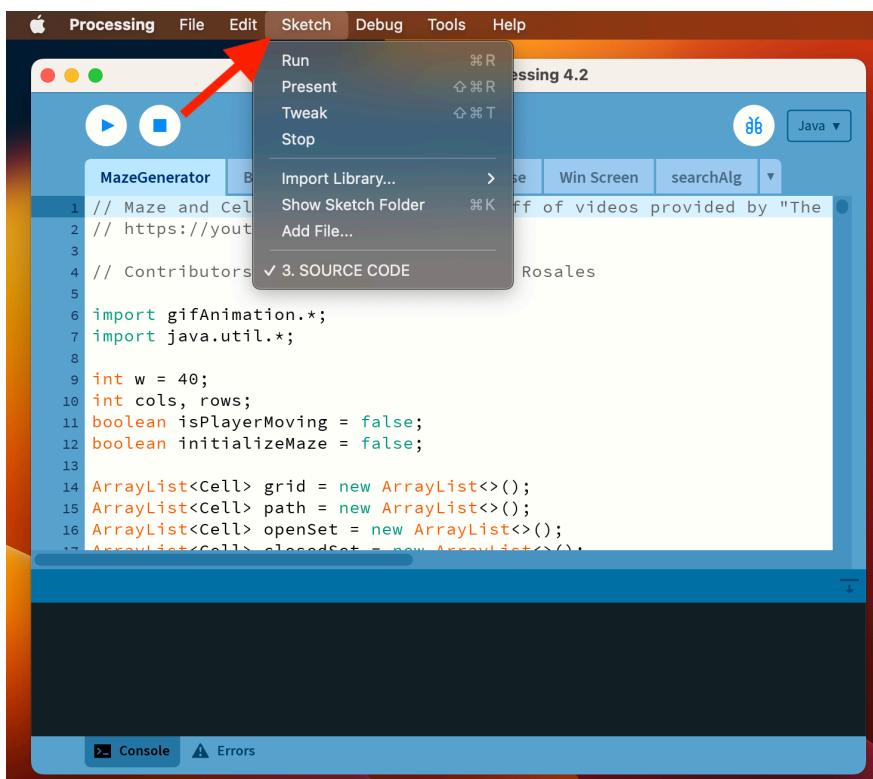


Figure 1.1

4.3.2. Click “Import Libraries” (Figure 1.2)

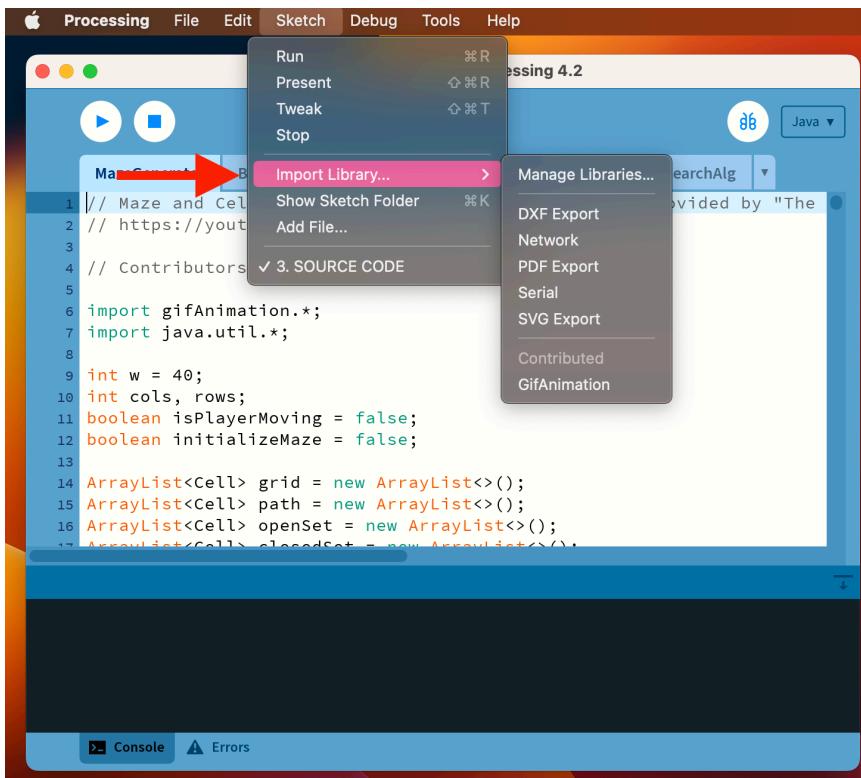


Figure 1.2

4.3.3. If “GifAnimations” is **not** listed under “Contributed” (Figure 1.3) click on “Manage Libraries” (Figure 1.4)

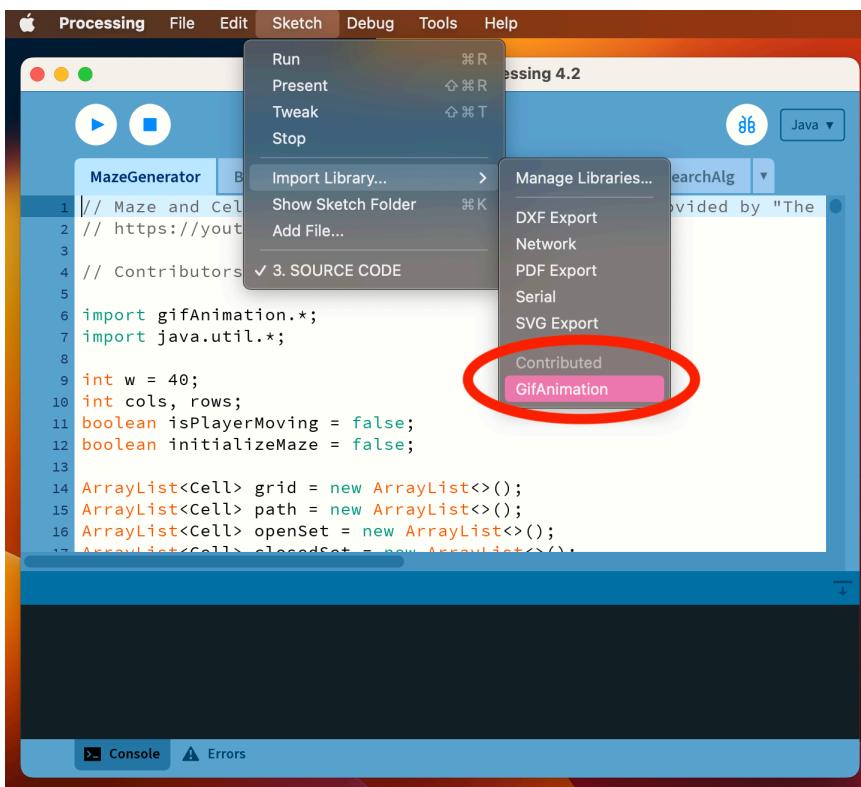


Figure 1.3

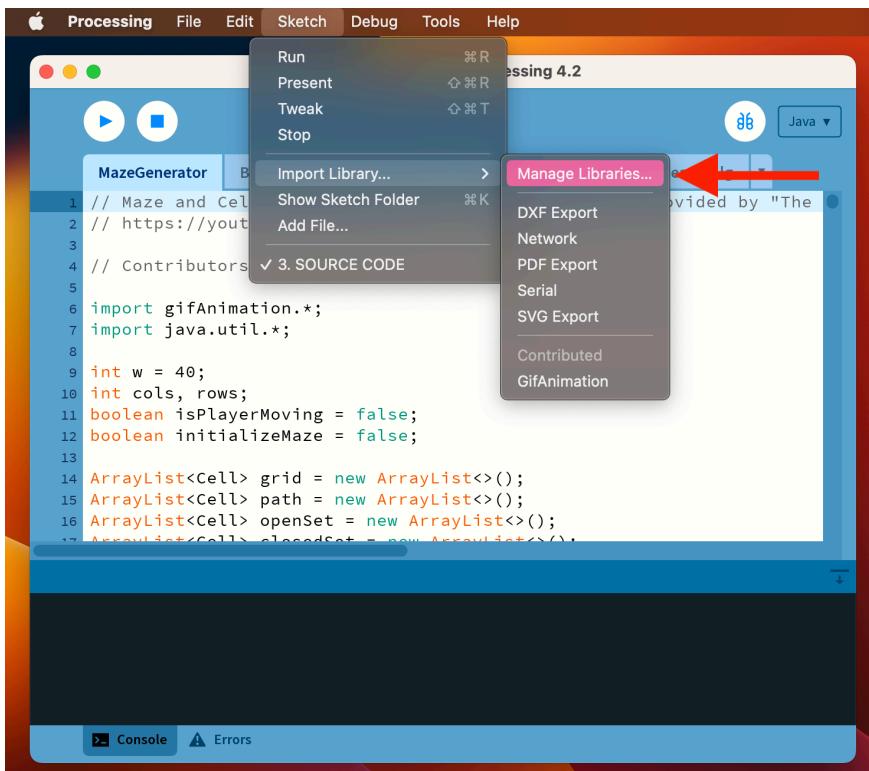
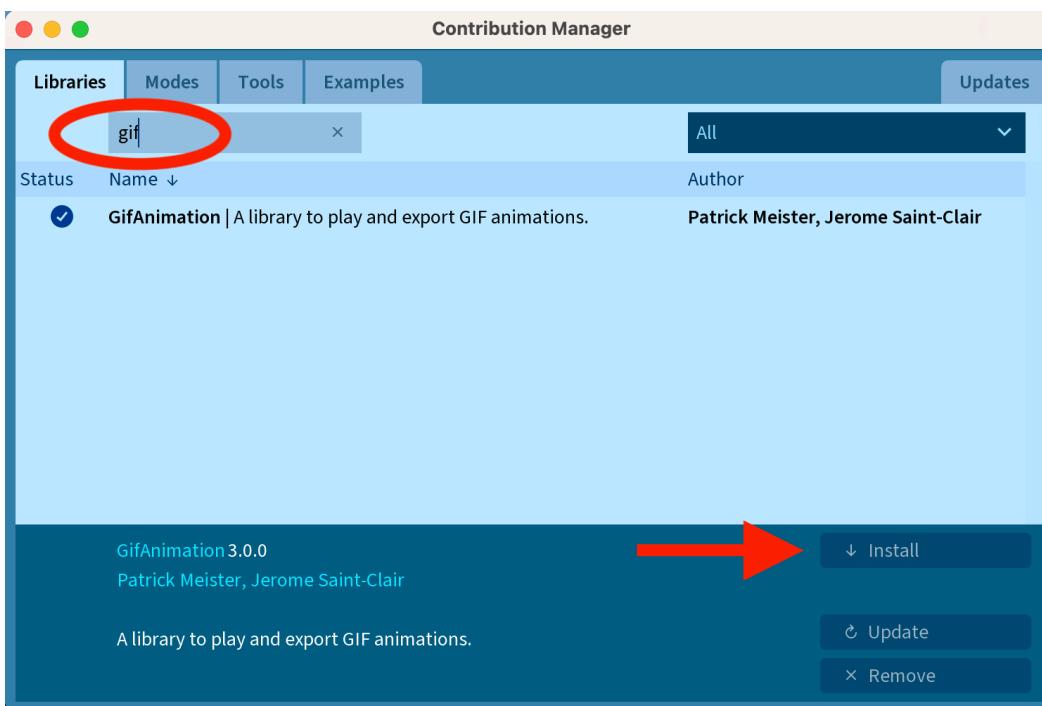


Figure 1.4

4.3.3.1. Type “gif” in the search bar and then click “Install” for “GifAnimation | A library to play and export GIF animations.” By Patrick Meister, Jerome Saint-Clair. (Figure 1.5)



4.4. Press the play button and play the game! (Figure 2)

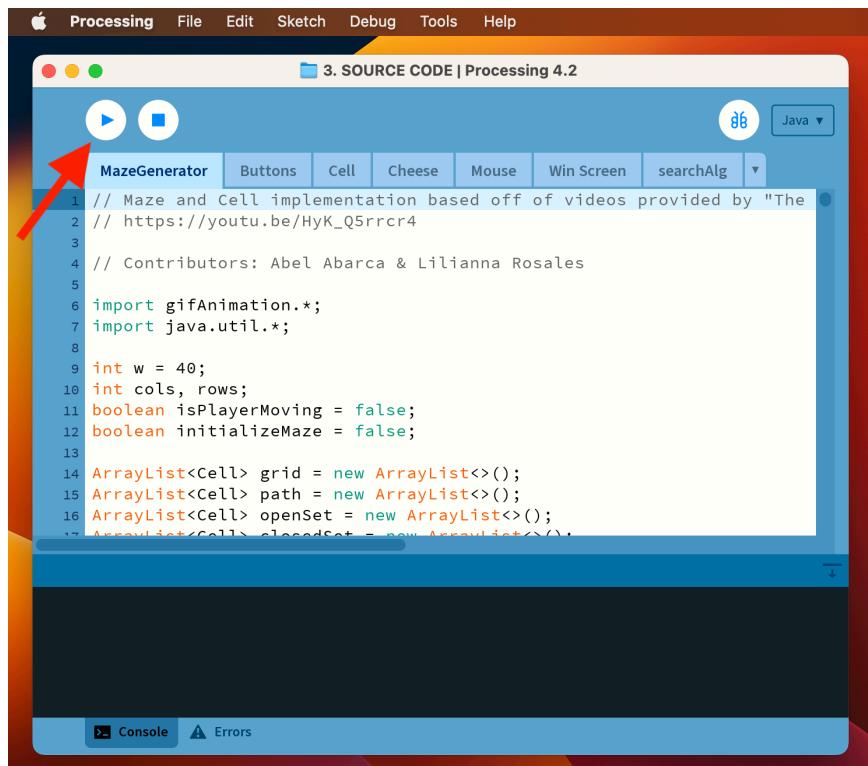


Figure 2

5. Demonstration

5.1. Once you press play, a new window will pop up with the game for you to play (Figure 3)

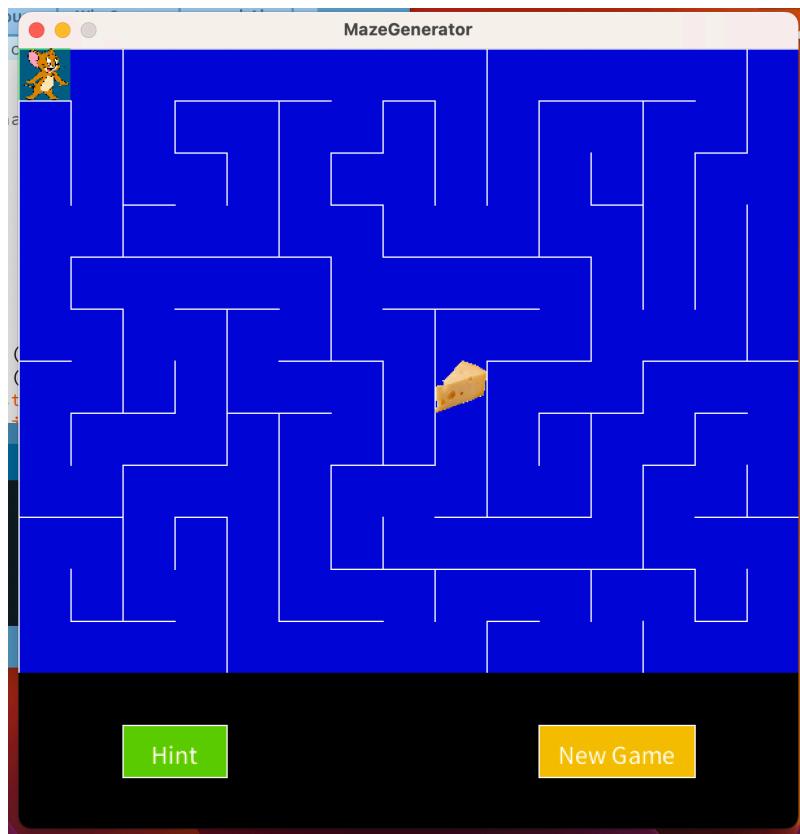


Figure 3

5.2. Use your keyboard arrow keys to move Jerry, the mouse, through the game to the cheese (Figure 4)

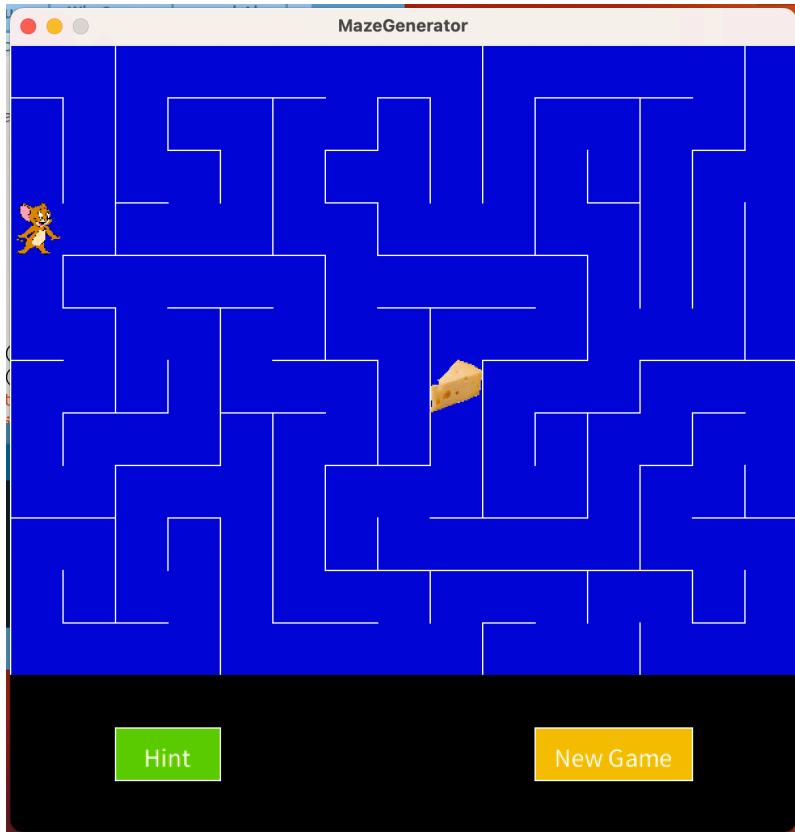


Figure 4

5.3. If you need help you can click on the “Hint” button and follow the orange cells to the cheese (Figure 5)

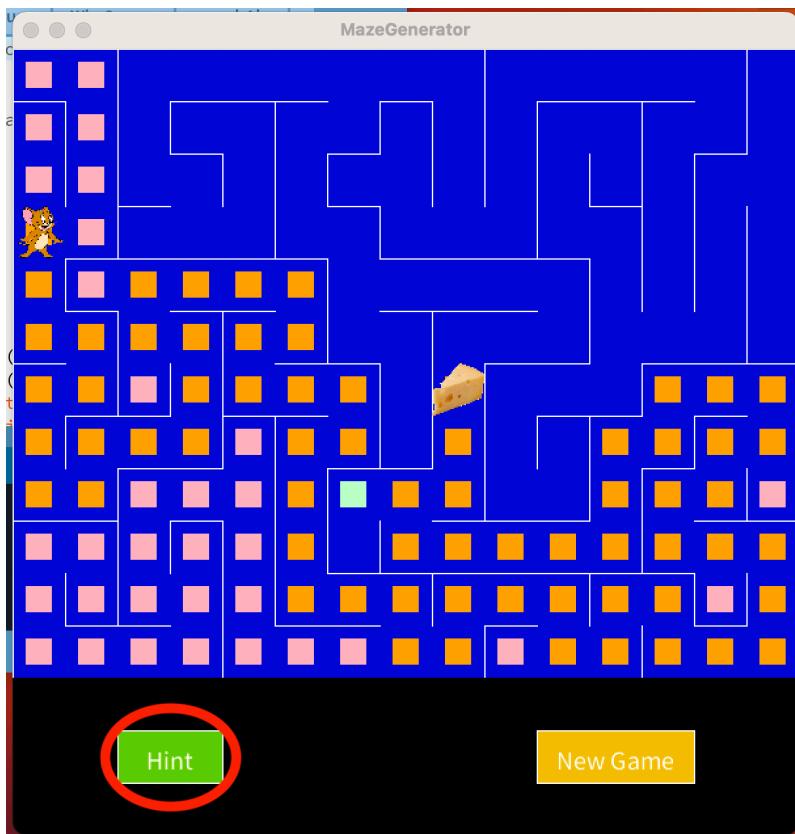


Figure 5

5.4. If you don't like the maze generated, you click on "New Game" to generate a new one (Figure 6)

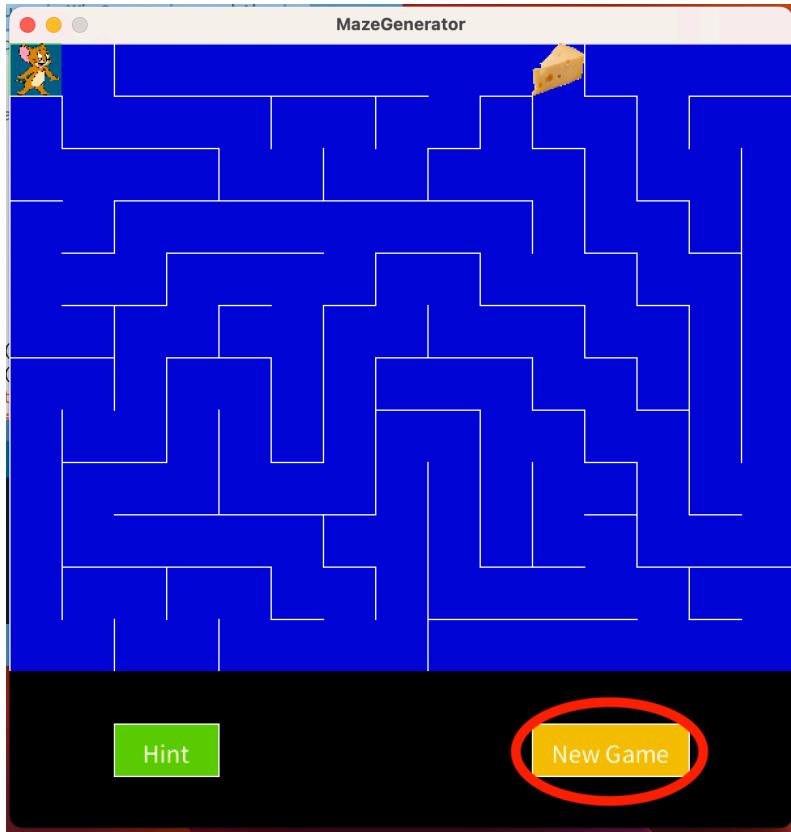


Figure 6

5.5. Once you make it to the cheese, a "Win" pop up will be displayed (Figure 7)

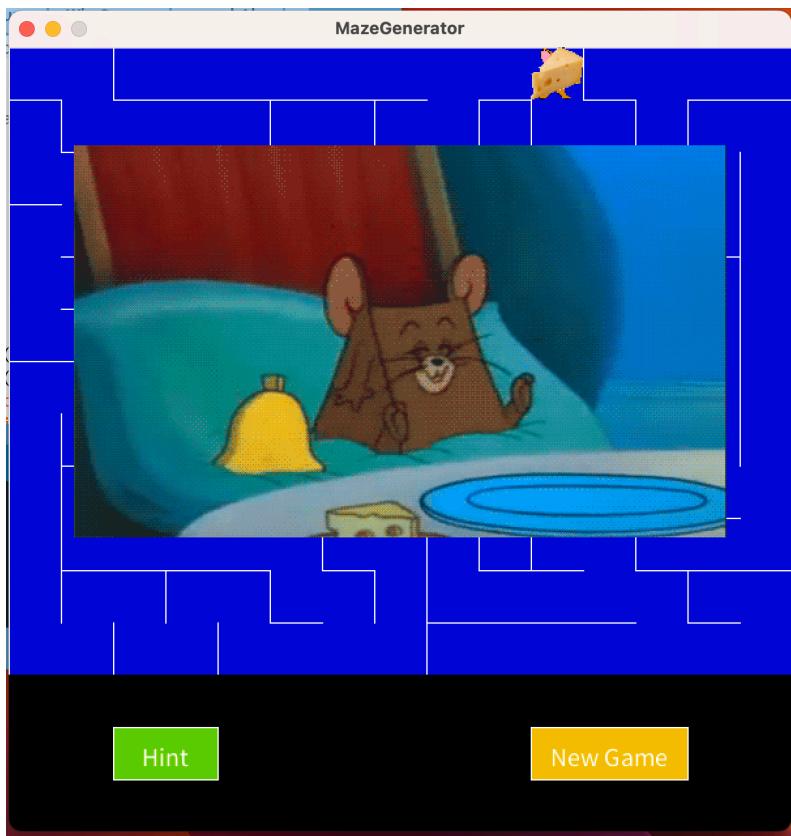
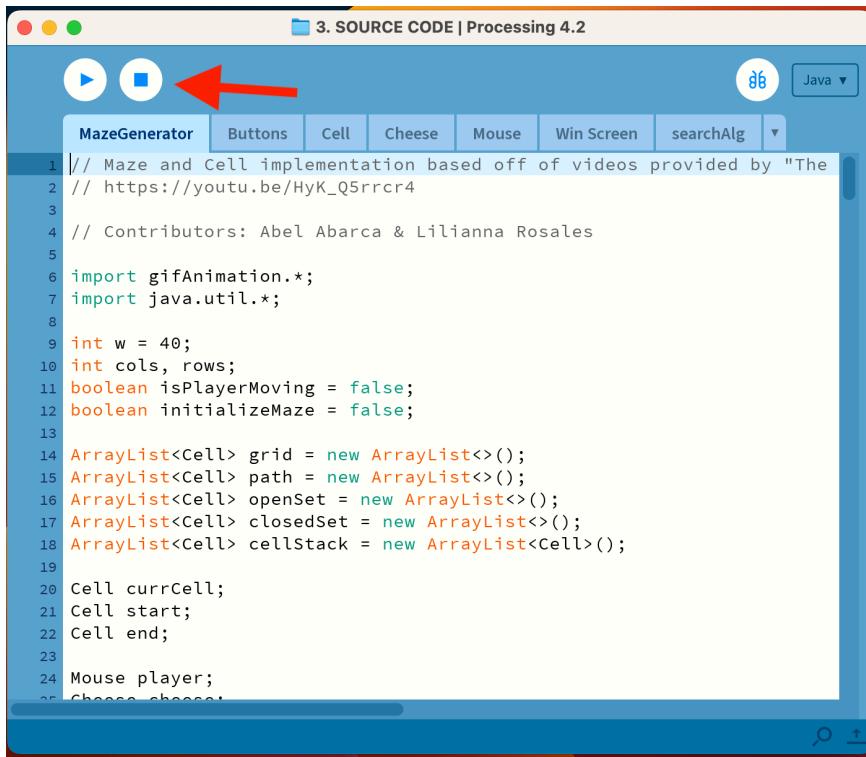


Figure 7

5.6. Now you can end the game by closing the window or pressing the Stop button in Processing (Figure 8)



The screenshot shows the Processing 4.2 IDE interface. The title bar reads "3. SOURCE CODE | Processing 4.2". The toolbar has several icons, with a red arrow pointing to the second icon from the left, which is a square with a diagonal line (the Stop button). Below the toolbar is a menu bar with tabs: "MazeGenerator", "Buttons", "Cell", "Cheese", "Mouse", "Win Screen", "searchAlg", and a dropdown menu "Java". The main area displays the source code for a maze generator:

```
// Maze and Cell implementation based off of videos provided by "The  
// https://youtu.be/HyK_Q5rrcr4  
  
// Contributors: Abel Abarca & Lilianna Rosales  
  
import gifAnimation.*;  
import java.util.*;  
  
int w = 40;  
int cols, rows;  
boolean isPlayerMoving = false;  
boolean initializeMaze = false;  
  
ArrayList<Cell> grid = new ArrayList<>();  
ArrayList<Cell> path = new ArrayList<>();  
ArrayList<Cell> openSet = new ArrayList<>();  
ArrayList<Cell> closedSet = new ArrayList<>();  
ArrayList<Cell> cellStack = new ArrayList<Cell>();  
  
Cell currCell;  
Cell start;  
Cell end;  
  
Mouse player;  
Cheese cheese;
```