

GameMaker: The Independent School 2015

(all content for this class, including Gamemaker and additional resources, is available at <http://tinyurl.com/Gamemaker2015>)

Week 1: Your First Game

Game Description:

- A sprite (the main character) moves around in a room on the screen
- When the sprite hits a wall it bounces off the wall
- If we click on the sprite, we get points! :-)
- If we click and miss the sprite, we lose points! :-(
- There's fun music, sound effects, and a sprite explosion so we know when we hit the sprite

I. Getting Started

- | | |
|---|---|
| 1. set up sprite and room: | a. create a wall sprite |
| a. create a sprite | b. make an object for the wall sprite |
| b. create object for sprite | c. make the wall solid |
| c. put sprite in room | d. outline the room with wall sprites |
| 2. make your sprite move! | 4. make sprite bounce against the walls |
| a. create a rule to make object move when created | a. create a rule in the main character object for collision |
| 3. make walls around the room | |

II. Add randomness to motion

- | | |
|--|--|
| 1. in the <i>create</i> event of the main sprite, add an <i>alarm</i> action | b. reset the alarm to “go off” after a certain number of steps |
| a. set the number of steps in which to trigger that alarm | c. optional: use <i>random_range</i> to choose the minimum and maximum steps for the alarm to “go off” |
| 2. add an <i>alarm</i> event to the main sprite | |
| a. choose a new random direction | |

III. Add sounds:

- | | |
|--|--|
| 1. add the sound you want for when you hit the sprite in the <i>sounds</i> section | 4. add a sound for when sprite randomly changes direction from our alarm |
| 2. add an action to play the sound for a left mouse button event | 5. add background music and make it loop |
| 3. using similar logic, add a sound for wall bounce | a. what event should start the background music? |

IV. Make an explosion when you click on the sprite

- | | |
|---|-----------------------------------|
| 1. add a new sprite which represents your explosion | b. wait (sleep) for a bit |
| 2. in your collision event: | c. change back to your old sprite |
| a. change to your new sprite | d. start moving! |

V. Add penalty when you miss

- | | |
|--|---|
| 1. add a global mouse left-press event | 2. add a “set score” action of -1 <i>relative</i> |
|--|---|

VI. Bonus stuff: can you...

- | | |
|---|--|
| 1. Draw your own sprites? | a. make the main sprite get faster and faster? |
| 2. Make sprite choose a new random location after every time you click on it? | 5. Set an end to the game |
| 3. Record your own sounds using the Windows Sound Recorder? | a. time limit |
| 4. gradually make the game harder? | b. high score |
| | c. add room(s) |

Don't forget to save your work!