GameMaker: Jardine Middle School 2014

(all content for this class, including Gamemaker and additional resources, is available at http://tinyurl.com/Gamemaker2014)

Day 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 sprite
   b. create object for sprite
   c. put sprite in room
2. make your sprite move!
   a. create a rule to make object move when created
3. make walls around the room
4. make sprite bounce against the bricks
   a. create a rule in the main character object for collision

a. create a brick sprite
b. make an object for the brick sprite
c. make the brick solid
d. outline the room with brick sprites

II. Add randomness to motion

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

III. Add sounds:

1. add the sound you want for when you hit the sprite in the *sounds* section
2. add an action to play the sound for a left mouse button event
3. using similar logic, add a sound for wall bounce
4. add a sound for when sprite randomly changes direction from our alarm
5. add background music and make it loop
   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
2. in your collision event:
   a. change to your new sprite
   b. wait (sleep) for a bit
   c. change back to your old 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 *relative*

VI. Bonus stuff: can you...

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

Don't forget to save your work on your flash drive!