

Pixels and Animation 1

Sketch 1 — Simple Bounce

Description:

The sprite moves across the stage forever. When it touches the edge, it bounces back.

Requirements shown:

- Loop (forever)
- Conditional (if on edge, bounce)

Sketch 2 — Keyboard Walker

Description:

The sprite moves right when the right arrow is pressed, and left when the left arrow is pressed. The speed variable controls how fast it moves.

Requirements shown:

- Variable (speed)
- User input (arrow keys)
- Loop (forever)
- Conditional (if key pressed)

Sketch 3 — Random Teleporter

Description:

When the space key is pressed, the sprite jumps to a random location on the stage. This repeats as long as the program runs.

Requirements shown:

- Loop (forever)
- Conditional (if key pressed)
- User input (space key)
- Randomness (pick random for X and Y positions)

Sketch 4 — Abby: Speeding Sprite with Custom Block

Description:

The sprite starts in a random direction and moves at a speed controlled by the speed variable. It bounces off the edges, flashes colors on impact, and speed can be increased/decreased with arrow keys. A custom block (My Move) organizes the motion and bounce logic.

Requirements shown:

- Loops (forever, repeat)
- Conditionals (if touching edge, if key pressed, if speed < 1)
- Variable (speed)
- User input (arrow keys)
- Randomness (random direction at start)
- Bonus: Custom block (My Move)