



Game Programming for Adults

using Scratch to make a hero game

Below is a list of step-by-step instructions for creating a Hero Game using the programming language Scratch. Access to this programming language is available at:

scratch.mit.edu

Click on “Create” in the top left to get started.

Scratch Hero Game

Phase 1: Get rid of the cat

1. Right click on the cat sprite.
2. Click delete.

Phase 2: Add backdrops

1. If you are creating this game at home, you will need to create backdrops.
 - a. Click on Stage on the left.
 - b. Click on Backdrops at the top of the screen.
 - c. Click on the paintbrush.
 - d. Use the tools on the left side of the screen and the colors at the bottom to draw a backdrop containing red circles and a blue square.
 - e. Click on the paintbrush again to create a new backdrop.
 - f. Create at least 3 different backdrops. Each backdrop should contain red circles and a blue square.
2. Get rid of the white backdrop.
 - a. Right click on backdrop1.
 - b. Click on delete.

Phase 3: Change backdrop

1. Click on Scripts.
2. Click on Events. → Drag over “when (green flag) clicked” block.
3. Click on Looks. → Drag over “next backdrop” block.

Phase 4: Add hero

1. If you are creating this game at home, you will need to choose one of the sprites available through Scratch.
2. Under “New Sprite” click on “Choose sprite from library.”
3. Click on a sprite to be your hero and click on “OK.”

Phase 5: Move hero

1. Click on Events. → Drag over “when (green flag) clicked” block.
2. Click on Motion. → Drag over “go to x:79 y:-49” block. (Note: the numbers might be different on your computer.)
 - a. Click on 79 (the first number) and change to -200.
 - b. Click on -49 (the second number) and change to 0.

- c. The block should now say “go to x:-200 y:0.”
3. Drag over “point in direction 90” block.
4. Click on Control. → Drag over “forever” loop block.
5. Drag over “if then” loop block.
 - a. Click on Sensing. → Drag “touching color?” block and put into “if then” block.
 - b. Click on colored box in touching color block. → Click on a red circle in the backdrop.
 - c. Click on Looks. → Drag over “say Hello! for 2 secs” block.
 - d. Click on Hello! and change to You lose!
 - e. The block should now say “say You lose! for 2 secs.”
 - f. Click on Control. → Drag over “stop all” block.
6. Drag over “if then” loop block.
 - a. Click on Sensing. → Drag “touching color?” block and put into “if then” block.
 - b. Click on colored box in touching color block. → Click on the blue square in the backdrop.
 - c. Click on Looks. → Drag over “say Hello! for 2 secs” block.
 - d. Click on Hello! and change to You win!
 - e. The block should now say “say You win! for 2 secs.”
 - f. Click on Control. → Drag over “stop all” block.
7. Drag over “if then” loop block.
 - a. Click on Sensing. → Drag “key space pressed?” block and put into “if then” block.
 - b. Click on click on “space” and click on “up arrow.”
 - c. Click on Motion. → Drag over “point in direction 90” block.
 - d. Click on 90 and change to 0.
 - e. The block should now say “point in direction 0.”
 - f. Drag over “move 10 steps” block.
8. Click on Control. → Drag over “if then” loop block.
 - a. Click on Sensing. → Drag “key space pressed?” block and put into “if then” block.
 - b. Click on click on “space” and click on “down arrow.”
 - c. Click on Motion. → Drag over “point in direction 90” block.
 - d. Click on 90 and change to 0.
 - e. The block should now say “point in direction 0.”
 - f. Drag over “move 10 steps” block.
 - g. Click on 10 and change to -10.
 - h. The block should now say “move -10 steps.”
9. Click on Control. → Drag over “if then” loop block.
 - a. Click on Sensing. → Drag “key space pressed?” block and put into “if then” block.
 - b. Click on click on “space” and click on “left arrow.”
 - c. Click on Motion. → Drag over “point in direction 90” block.
 - d. Drag over “move 10 steps” block.
 - e. Click on 10 and change to -10.
 - f. The block should now say “move -10 steps.”
10. Click on Control. → Drag over “if then” loop block.
 - a. Click on Sensing. → Drag “key space pressed?” block and put into “if then” block.
 - b. Click on click on “space” and click on “right arrow.”
 - c. Click on Motion. → Drag over “point in direction 90” block.
 - d. Drag over “move 10 steps” block.

Click on the green flag and play your hero game!