#### **Materials Needed:**

- Computer with internet access
- Web browser (like Chrome, Firefox, Edge)
- Access to a free block coding website (e.g., Scratch: scratch.mit.edu or Code.org: code.org)
- Paper and pencil (optional, for sketching ideas)

## Introduction: Becoming a Game Creator! (10 mins)

Have you ever played a video game and thought, "I wish I could make my own game!"? Well, today you're going to take your first step! We're going to use something called 'block code'. Think of it like digital Lego bricks. Each block is an instruction (like 'move forward', 'turn left', 'say hello'). By snapping these blocks together, you tell the computer exactly what you want characters in your game to do. It's a fun and visual way to learn the basics of coding, which is how all video games, apps, and websites are made!

## **Exploring the Playground: The Coding Platform (15 mins)**

Let's head over to Scratch (or your chosen platform). We'll explore the main areas:

- 1. **The Stage:** This is where your game happens! You'll see your characters and backgrounds here.
- 2. **The Sprite List:** Sprites are the characters or objects in your game. You can choose from a library or even draw your own later!
- 3. **The Code Blocks Palette:** This is where all your 'digital Lego bricks' live, sorted by categories like Motion, Looks, Sound, Events, Control.
- 4. **The Coding Area:** This large empty space is where you'll drag and snap your code blocks together to build scripts for your sprites.

Take a few minutes to click around. See the different sprites? Look at the different types of code blocks. Don't worry about understanding everything yet, just get familiar with the layout.

# Your First Code: Making a Sprite Move! (25 mins)

Let's make something happen! We'll make the default cat sprite (or choose another simple one) move when we press a key.

- 1. **Select Your Sprite:** Make sure the sprite you want to control is selected in the Sprite List.
- 2. **Start with an Event:** Go to the 'Events' category (often yellow). Find the block that says 'when [space] key pressed'. Drag it into the Coding Area. This block tells the computer: "Listen for the space key!"
- 3. **Add Movement:** Go to the 'Motion' category (often blue). Find the block 'move 10 steps'. Snap it directly underneath the 'when space key pressed' block. You should hear a little click sound.
- 4. **Test It!:** Click the green flag (usually above the Stage) to start the 'game'. Now, press the space bar on your keyboard. What happens? The sprite should move forward a little bit each time you press it!
- 5. **Experiment!:** Try changing the number in the 'move 10 steps' block. What happens if you make it 50? What about -10? Try changing the key in the 'Events' block from 'space' to an arrow key (like 'right arrow'). Can you make the sprite move right when you press the right arrow?

## Challenge: Left and Right! (Optional Extension)

Can you figure out how to make the sprite move right when the right arrow key is pressed AND move left when the left arrow key is pressed? Hint: You'll need two separate 'when key pressed' event blocks and think about how to move left (maybe using a negative number or a 'point in direction' block?)

### Wrap-up: You're a Coder! (5 mins)

Wow! You just wrote your first lines of code and controlled a character on the screen. You used event blocks to start actions and motion blocks to make movement. This is the very beginning of game design! Think about what else you could make your sprite do. Could it jump? Could it talk? Keep exploring the different blocks and see what amazing things you can create!