

Scratch Programming

1. Introduction to Scratch

- What is Scratch?
 - Overview of Scratch interface (Stage, Sprites, Blocks, Scripts area)
 - How to create a Scratch account and start a new project
 - Basic terminology: Sprites, Backdrops, Costumes, Sounds
-

2. Basic Programming Concepts in Scratch

- **Events:** Triggering actions (e.g., when green flag clicked, when key pressed)
 - **Motion:** Moving sprites using motion blocks (e.g., move, glide, turn)
 - **Looks:** Changing the appearance of sprites (e.g., say, hide, show, change costume)
 - **Control:** Loops and conditional statements (e.g., forever, repeat, if)
-

3. Creating Interactive Projects

- **Animations:** Simple sprite animations using motion and looks blocks
 - **User Interaction:** Moving sprites with the keyboard (e.g., arrow keys, spacebar)
 - **Sound:** Adding sound effects to your projects
-

Scratch Programming

4. Using Variables and Basic Game Elements

- **Variables:** Creating and using variables for tracking data (e.g., score, timer)
 - **Lists:** Storing multiple values in a list (e.g., high scores)
 - **Simple Game Design:** Creating basic interactive games (e.g., catch the falling object)
-

5. Debugging and Troubleshooting

- Identifying and fixing common issues in your projects
 - Using comments to explain and organize your code
 - Testing your projects for errors
-

6. Sharing and Publishing Projects

- Saving and sharing your Scratch projects with the community
- Remixing other users' projects
- Getting feedback and improving your projects