

5-Day, 4 Hours per Day Lesson Plan: Learn Programming and Make a Video with Scratch

Day 1: Introduction to Scratch and Basic Concepts

Hour 1: Introduction to Scratch

- Overview of Scratch: What it is, its purpose, and examples of projects.
- Create Scratch accounts.
- Brief tour of the Scratch interface.

Hour 2: Basic Programming Concepts

- Introduce sprites, stages, and the concept of scripts.
- Basic Scratch blocks: Motion, Looks, Sound.
- Simple exercise: Make a sprite move and say something.

Hour 3: Creating Simple Animations

- Use motion and looks blocks to create simple animations.
- Exercise: Create an animation where a sprite moves across the screen and changes costumes.

Hour 4: Introduction to Control Blocks

- Explain control blocks (e.g., loops, if-then statements).
- Exercise: Create a sprite that repeats an action using loops.

Day 2: Advanced Scratch Blocks and Interactive Projects

Hour 1: More on Control Blocks and Variables

- Deep dive into control blocks and introduction to variables.
- Exercise: Create a project that uses loops and variables.

Hour 2: Introduction to Events and Sensing Blocks

- Explain events and how to use sensing blocks to interact with the user.
- Exercise: Create an interactive project where a sprite reacts to keyboard inputs.

Hour 3: Introduction to Operators and More Complex Interactions

- Discuss operators and how to use them in Scratch.
- Exercise: Create a project that includes conditional statements using operators.

Hour 4: Planning Your Video Project

- Brainstorming session: Ideas for a short video project.
- Start planning: Storyboarding and listing necessary sprites and actions.

Day 3: Developing the Video Project

Hour 1: Creating and Importing Sprites

- How to create and customize sprites.
- Importing and using existing sprites from the Scratch library.
- Exercise: Create custom sprites for your video project.

Hour 2: Designing Backgrounds and Scenes

- How to create and switch between backgrounds.
- Exercise: Design and implement backgrounds for different scenes of your video.

Hour 3: Scripting Actions and Dialogues

- Writing scripts for sprite actions and dialogues.
- Exercise: Script the first part of your video project.

Hour 4: Adding Sound and Music

- How to add and customize sound effects and music.
- Exercise: Add appropriate sound effects and background music to your video.

Day 4: Enhancing the Video Project

Hour 1: Refining Animations and Transitions

- Smooth out animations and transitions between scenes.
- Exercise: Enhance the animations and transitions in your video project.

Hour 2: Implementing Interactivity

- Adding interactive elements to your video (e.g., clickable buttons, user input).
- Exercise: Incorporate interactive elements into your project.

Hour 3: Testing and Debugging

- Test the project for any bugs or issues.
- Debugging techniques and tips.
- Exercise: Test and debug your video project.

Hour 4: Finalizing the Project

- Final adjustments and polishing.
- Review and finalize the video project for presentation.

Day 5: Presentation and Sharing

Hour 1: Project Presentation

- Each student presents their video project to the class.
- Provide constructive feedback on each project.

Hour 2: Peer Review and Improvement

- Students review each other's projects and suggest improvements.
- Time for making final adjustments based on feedback.

Hour 3: Exporting and Sharing Projects

- How to save, export, and share Scratch projects.
- Exercise: Export your project and upload it to the Scratch community.

Hour 4: Celebration and Reflection

- Celebrate the completion of the projects with a showcase.
- Reflect on the learning experience and discuss what students enjoyed and what could be improved.