Basics of Scratch: Level I
Suitable for: G4 - G7

Prerequisite: None
Duration: 15 Weeks
Classes per Week: 1 class (45 minutes each)

Course Overview:
Introduce foundational computer science concepts through Scratch, a visual programming platform. By the end of the course, learners will be able to create interactive animations and games using various block categories in Scratch.

Covered Topics

Unit 1: Introduction and Basics of Scratch
- Overview of the Scratch platform
- Understanding sprites and the stage
- Adding and customizing sprites
- Changing and creating backgrounds
- Creating custom sprites
- Simple animation using drawn sprites

Game Development Basics:
Scratch Junior Level II
Suitable for: G1 - G3

Unit 2: Motion and Control Blocks
- Introduction to Scratch blocks categories
- Using blocks to control basic animations
- Working with sprite dimensions
- Resizing and scaling sprites in projects
- Understanding basic motion blocks
- Moving sprites across the stage

Unit 3: Advanced Motion and Events
- Combining motion with timing
- Smooth movements and animations
- Controlling sprite direction
- Rotating and turning sprites
- Introduction to event blocks (clicks, key presses)
- Creating interactive projects with events

Unit 4: Sensing, Looks, and Control
- Detecting interactions between sprites
- Using sensing blocks in projects
- Changing the appearance of sprites
- Applying visual effects with looks blocks
- Advanced use of looks blocks for animations
- Combining looks with motion and events

Game Development Basics:
Scratch Junior Level II
Suitable for: G1 - G3

Materials Needed:
- Access to a computer or tablet
- Internet connection
- Chrome browser

Assessment

At the end of each lesson, learners will be assessed on their ability to apply concepts such as motion, loops, conditionals, sprite interactions, and messaging within their interactive projects and animations. Each assessment will focus on how well they can integrate these programming elements to create functional and creative solutions using Scratch.

Certification

A certificate of completion will be awarded upon the successful completion of the course.