Week 1: Introduction to Programming and Scratch

Class 1: Getting Started with Scratch

What is Programming?

- o Explaining programming as giving instructions to a computer.
- Why coding is cool and important.

What is Scratch?

o Introduction to Scratch as a fun tool for creating projects.

• Getting Familiar with Scratch:

- Navigating the Scratch screen where you build your projects.
- Learning about sprites (characters), backdrops (backgrounds), and scripts (instructions).

• Starting Your First Project:

Using basic blocks to make your first Scratch project.

Class 2: Motion and Looks

• Character Placement and Appearance:

o How to position and change the look of characters.

Basic Motion Blocks:

Learning how to move, turn, go to specific spots, and glide.

• Scratch Coordinates:

Understanding X and Y coordinates to position characters.

Weekly Assessment:

Create a short animation with characters moving and talking.

Week 2: Control Structures and Blocks

Class 3: Program Control and Events

Control Blocks:

Learning how to use blocks to control actions (like loops and conditions).

• Events Blocks:

Using events to start actions (like clicking a sprite).

Looks Blocks:

o Changing how sprites look (like changing costumes).

Sound Blocks:

o Adding sounds to your project.

Class 4: Advanced Control Structures

Sensing Blocks:

o Detecting things in your project (like touching an object).

Variables Blocks:

o Using variables to keep track of information (like scores).

• My Blocks (Custom Blocks):

o Creating your own blocks to simplify code.

Week 3: Advanced Concepts, Sensing, and Final Project

Class 5: Advanced Concepts

• Broadcasting:

o Sending messages to make sprites talk to each other.

Custom Blocks:

Creating and using custom blocks for special actions.

Advanced Sensing:

o Using sensors to detect things like environmental changes.

Class 6: Final Project and Presentation

• Final Project:

Work on a project that uses everything you've learned.

• Presentation:

Show and explain your final project to the class.