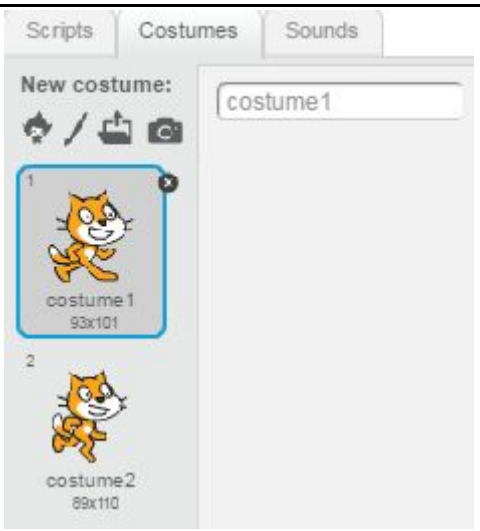
SCRATCH PROGRAMMING
Lesson Plan: Class 03 / PRG / 01 / 05

Overall goal of the lesson	**Introduce Scratch as programming language to children**
Prior knowledge required	Digital Literacy module completed. Required for opening and saving of projects

MODULE: **Module time: 5 *** 35 minutes

Goal:	**Introduce Scratch as programming language to children**
Description:	Children will learn about the Scratch programming language developed by the Lifelong Kindergarten Group at the MIT Media Lab. Scratch is an excellent language to introduce programming to children without talking about many of the nuances in real computer science implementations. This document lists the problems that the children would develop as part of the learning of the Scratch language.
Material required:	**Physical:** None **Electronic:** Scratch installed on the machines
Procedure Summary:	Request to follow the steps mentioned below for getting the students acquainted with Scratch. All steps to be performed by the teacher and students to follow the same.
Procedure Details Class 1	1. First explain that Scratch is software using which you can create your own interactive stories, games, and animations. 2. Following things need to be explained in Scratch, each with an example: a. Sprite or Actor – The cat, drag it around with the mouse  b. Stage – The background, show that one can choose different backgrounds. Choose background which would be suitable for the cat so that the students can better appreciate it.  c. Costumes – Show how one can change different costumes of the cat

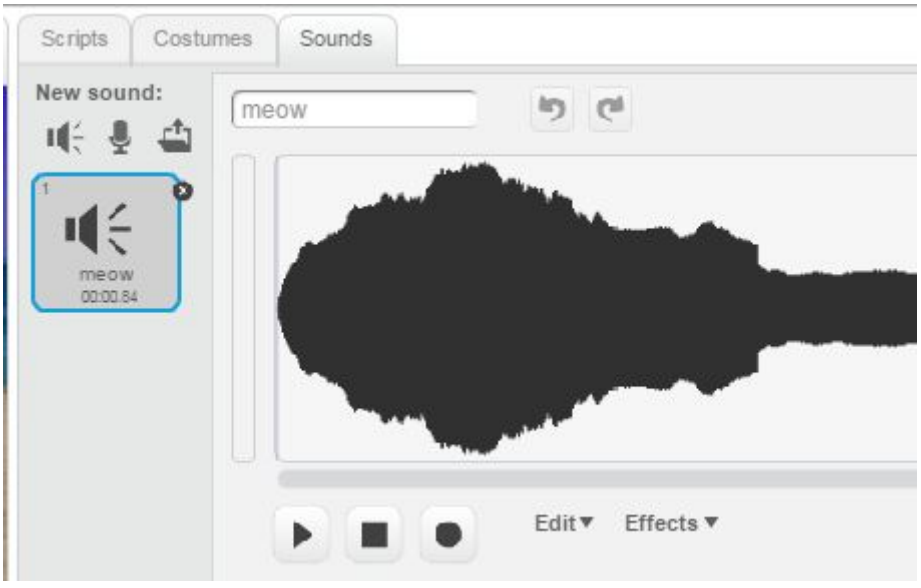


d. Actor's script – Take the move command for the cat. Show them how the cat moves 10 steps by double clicking on the command. Drag it back to center once it reaches the boundaries and repeat. Change value of steps to 20 50 100 and show how the movement changes. Also, change the step values to negative and show movement changes. Repeat the same with turning of the cat.

3. Let the children explore Scratch, ask them to drag different commands and see what it does for the cat.
4. Finally, tell them how to save their projects and open their projects again, edit them, save again and open again.

Procedure Details Class 2

1. Now let us see new features of the Sprite. All these instructions are should be one block each, helping children understand the features
2. First repeat of last lesson – Moving of the cat
3. Change of costume of the cat
4. Help the cat make different sounds.



5. Introduce 'if on edge bounce'. For this,
    a. Move the cat first to the edge by move command. This can be done by repeatedly clicking on the 'move 10 steps' command till the cat reaches the edge of the screen.
    b. Then click on 'if on edge bounce' and show how the cat turns. Do not combine

	the blocks in sequence. 
Procedure Details Class 3	1. Quick recap of last lesson 2. Let children understand that we can combine two commands. When combines, the first command is executed first and then the second command. Demonstrate this using move and sound and show that cat moves first and then sound is produced. Also, change order and show that it cat reverses its actions. 3. Next tell them that we can combine as many blocks as we want. Experiment with the same. 4. Introduce the wait block and make a sequence of 'move-wait-move' and 'move-wait-sound'. 
Information Broadcast:	In computer science children learnt about basic steps required to complete a task.