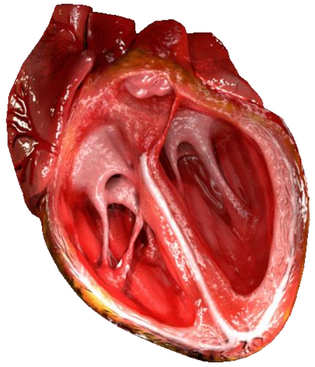
ATL Game Development Platform

Day 01

Introduction to Game Based STEM Resource



By Mr. Neeraj &
Ms. Chithra from
Learning Links Foundation

NITI Aayog

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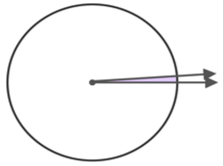
Agenda of the day

01 **Introduction to Game Based Resources (Animations/Games/Activities)**



$\frac{1}{360}$

$1°$

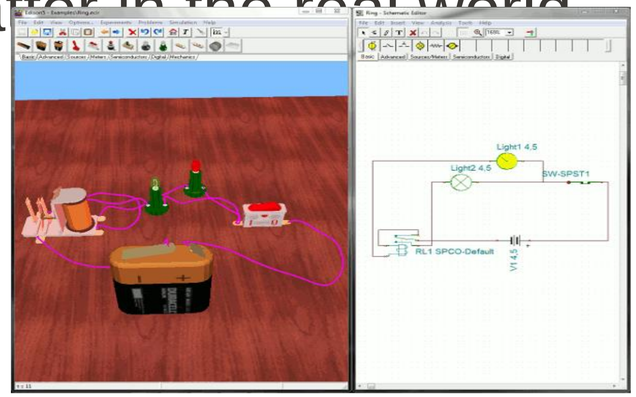
02 **Various ICT tools to Create Game Based Resources**

03 **Introduction to Scratch(Installing Software and Registration Process on Scratch**

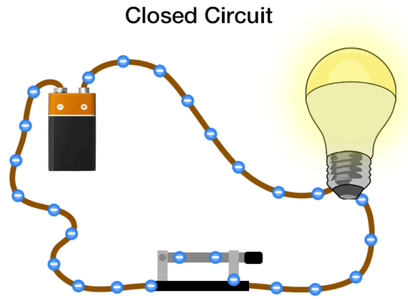
04 **Demonstration of Sample STEM Scratch Projects**

Game Based Resources

Game-based resources are **game plays, fun animations, quizzes and projects** with specific learning objectives. The game-based resource learning is designed to balance subject matter with gameplay/animations/projects, and the students' ability to retain and apply the subject matter in the real world.



Game Play : Virtual Circuit Connection and Simulation

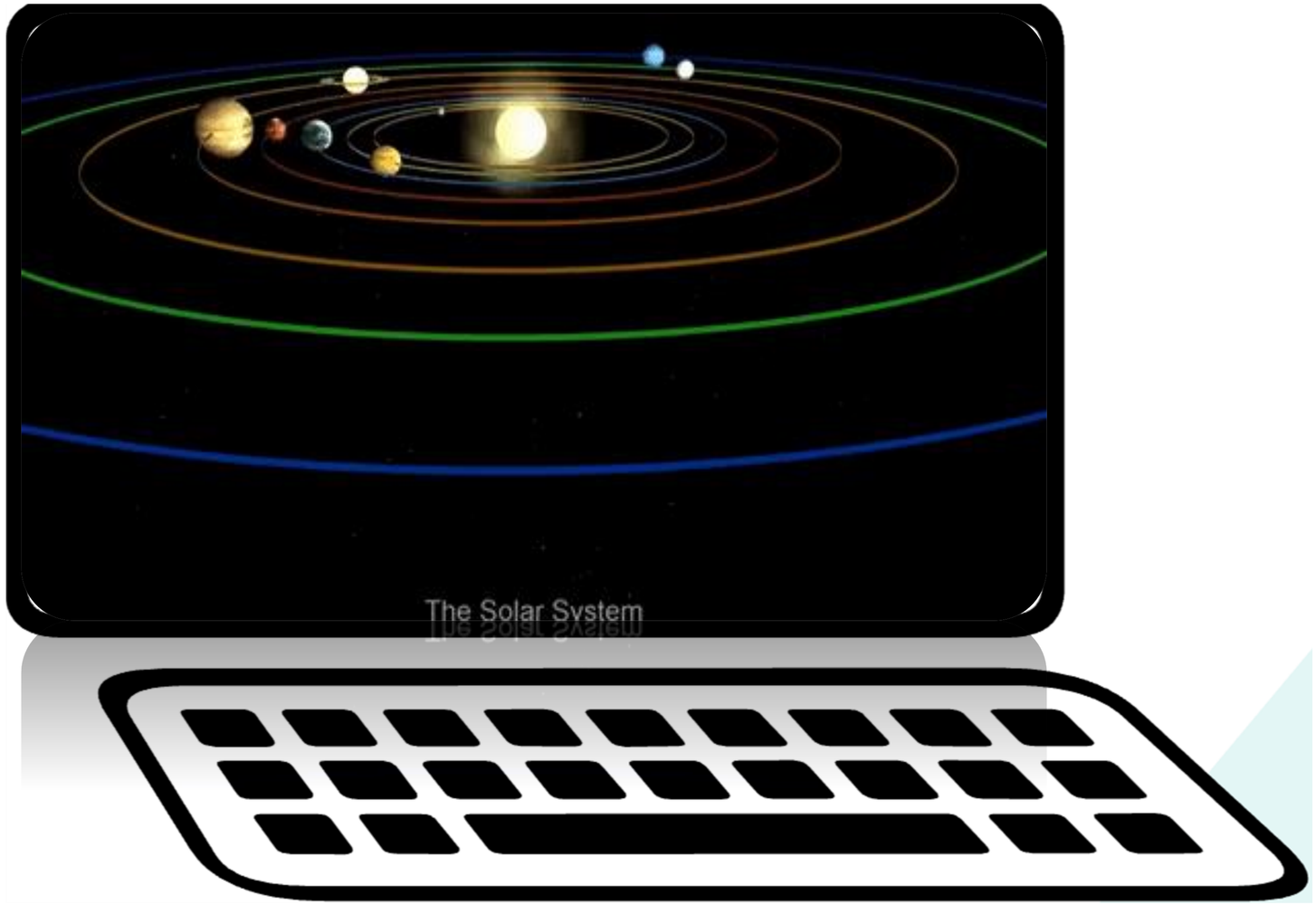


Animation : Flow of Current in a simple Circuit

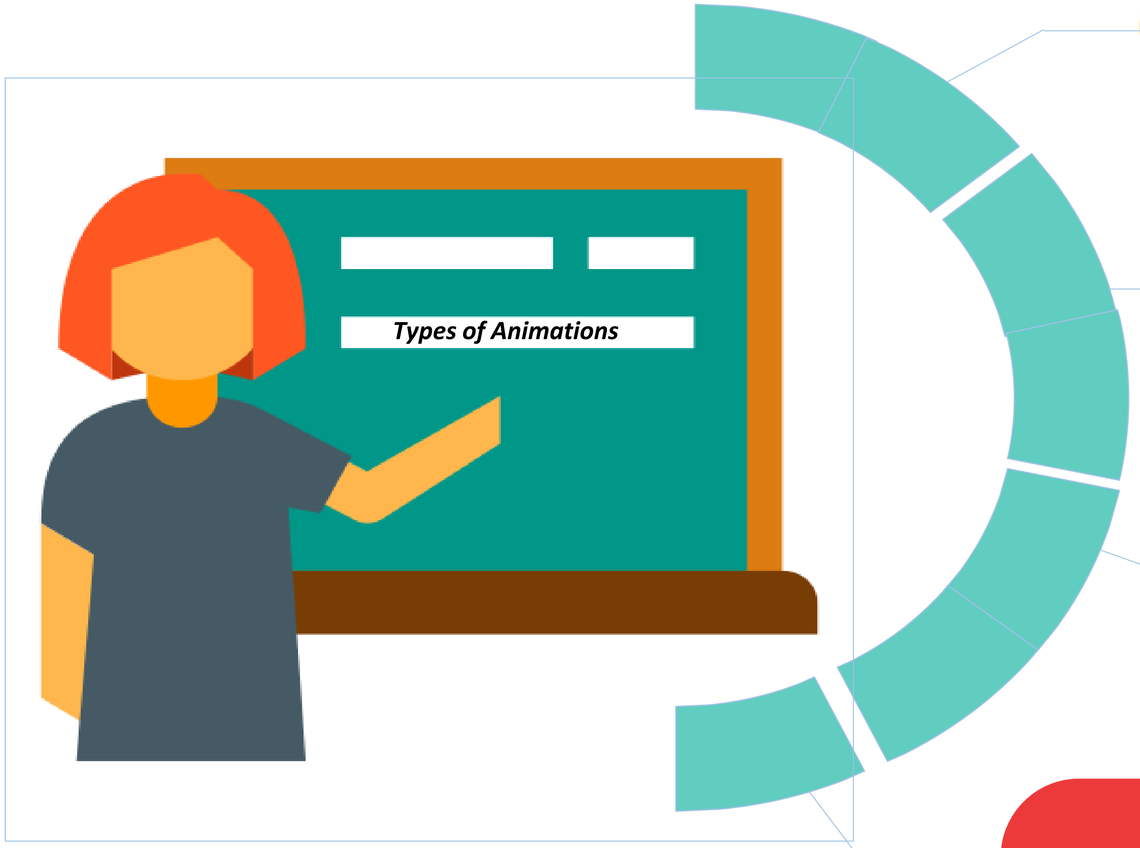
Game Based Learning Features

- Provide context and real world value of skill and content
- Encourage deeper learning, integration of knowledge base and skill sets
- Seamless accountability, feedback, intrinsic and extrinsic motivators
- Combine audio, graphics and movement into an interactive and immersive environment

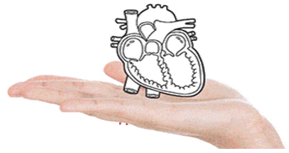
What are Animations ?



Types of Animations

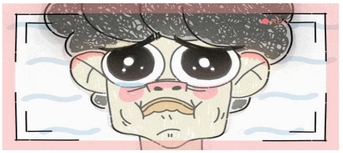


Whiteboard animations



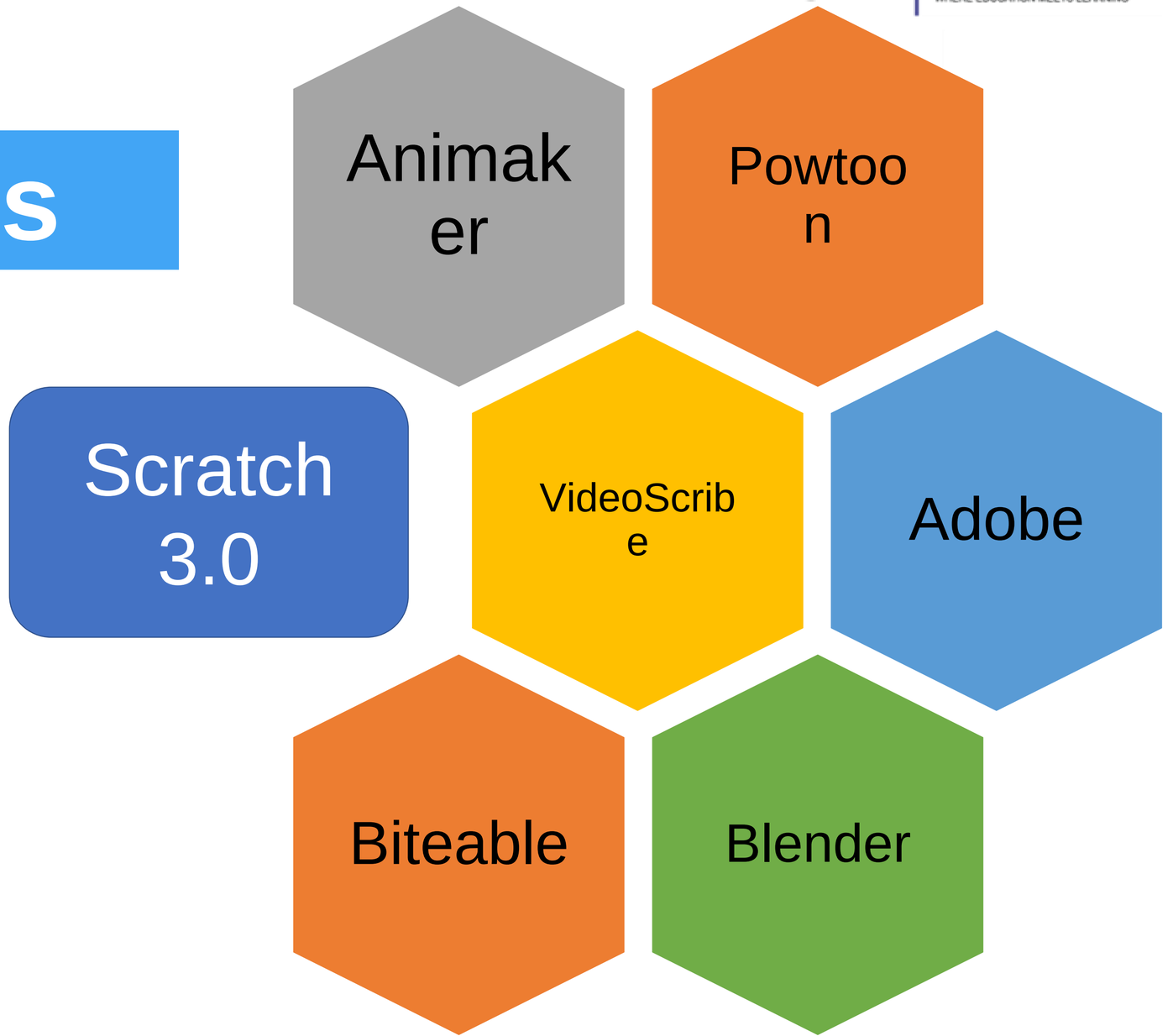
Motion graphics

Hand-drawn



Stop-motion

Various ICT Tools



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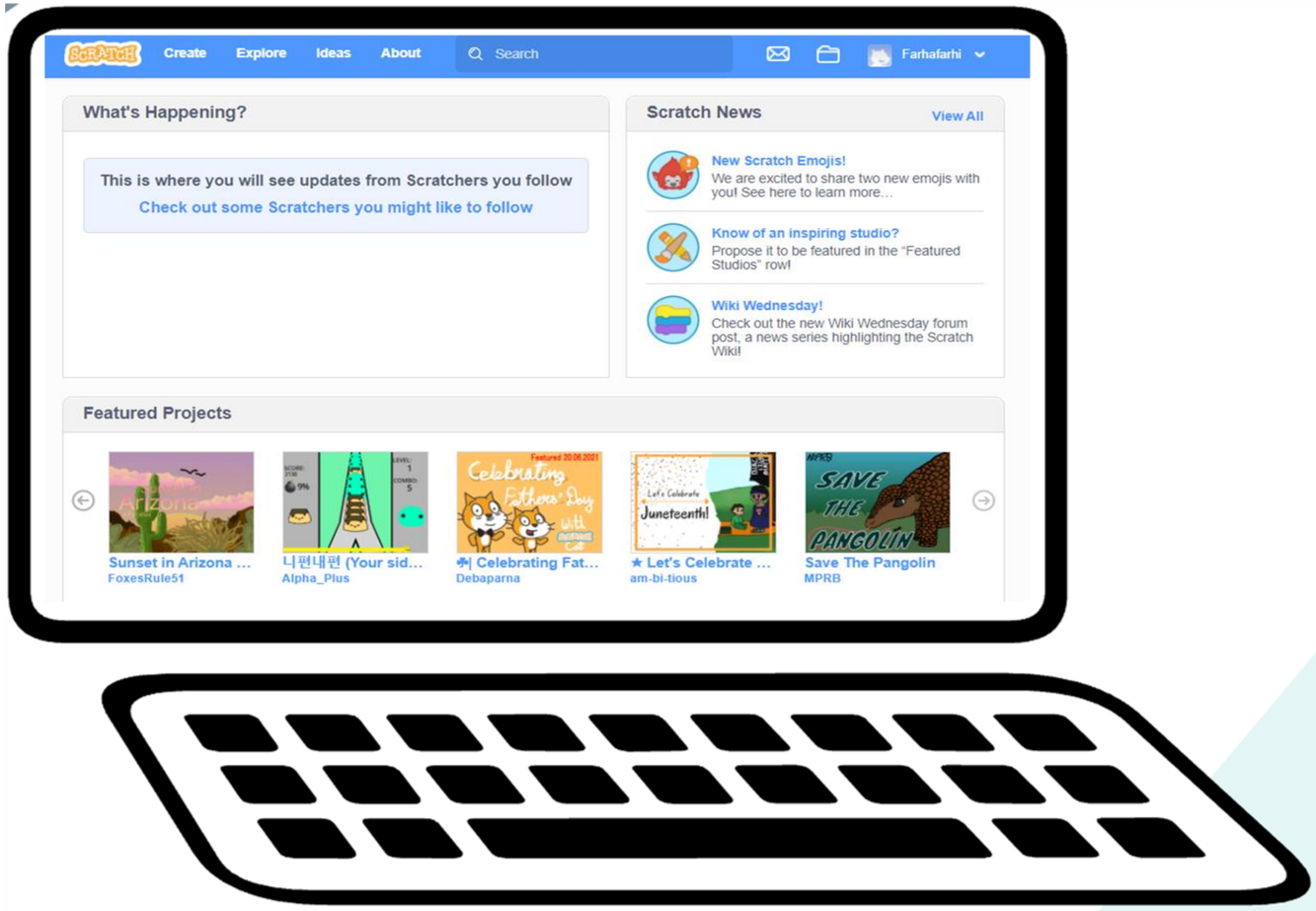
Scratch 3.0

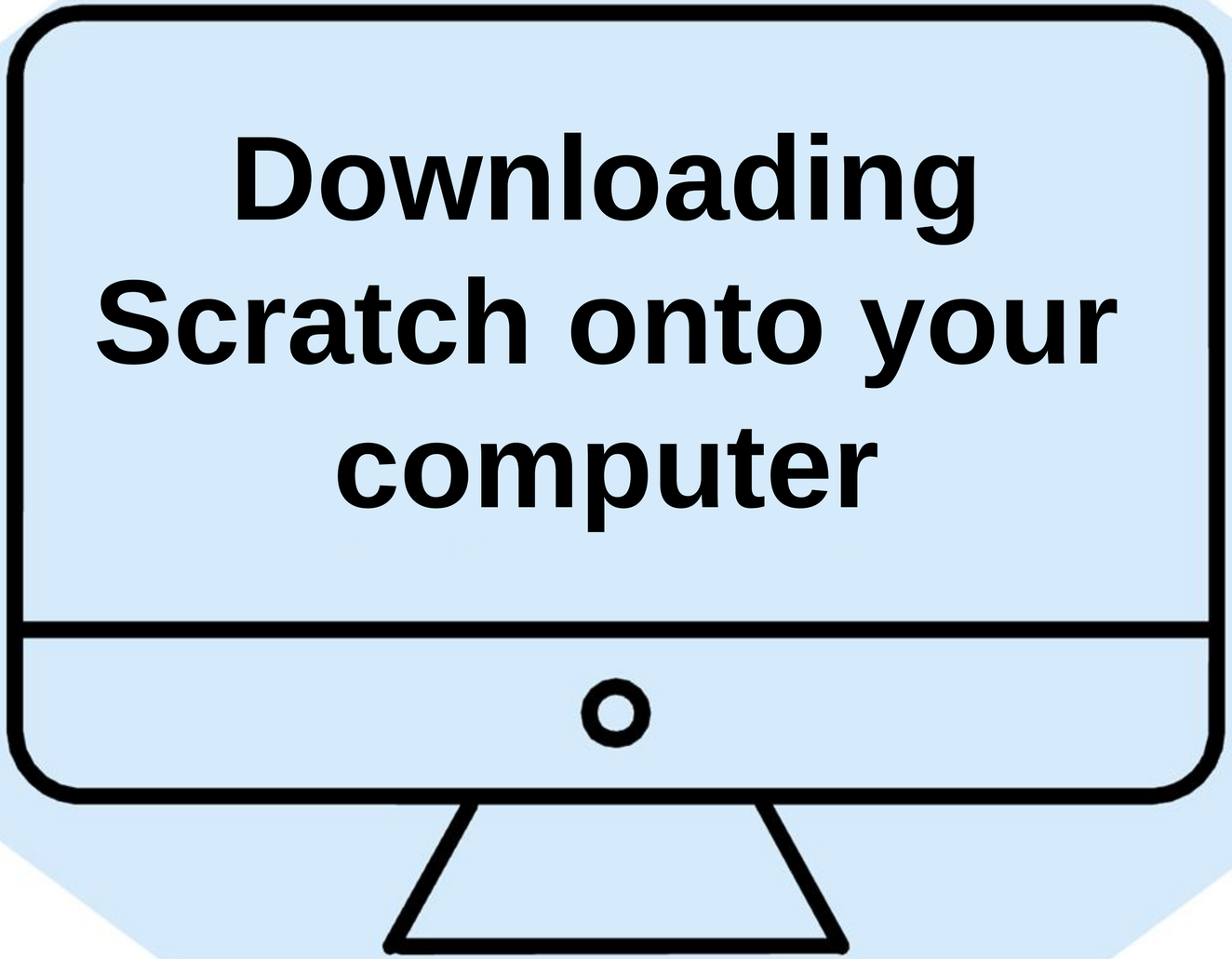


Scratch Versions

Online Versions

Offline Versions

Downloading Scratch onto your computer



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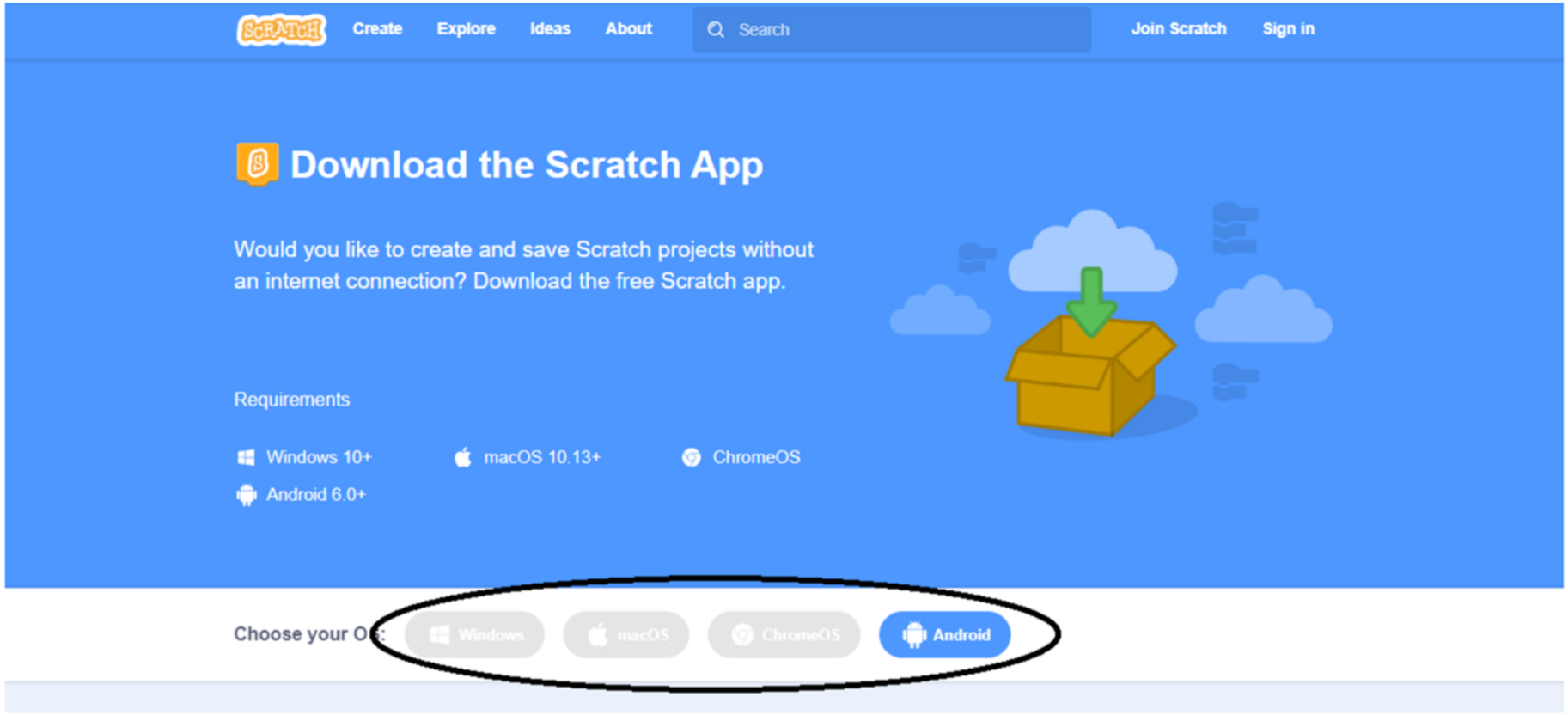
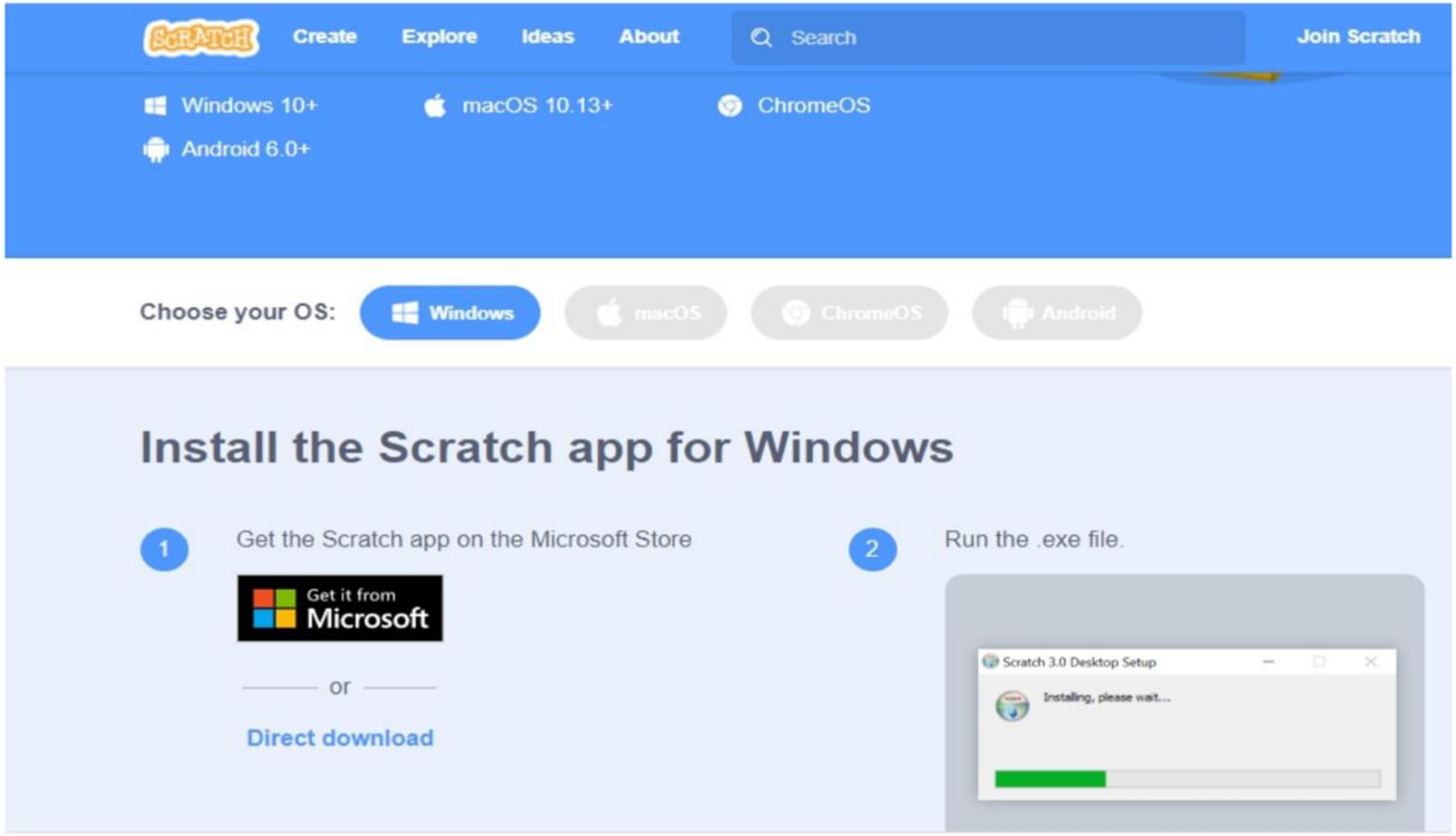
To download Scratch, Visit

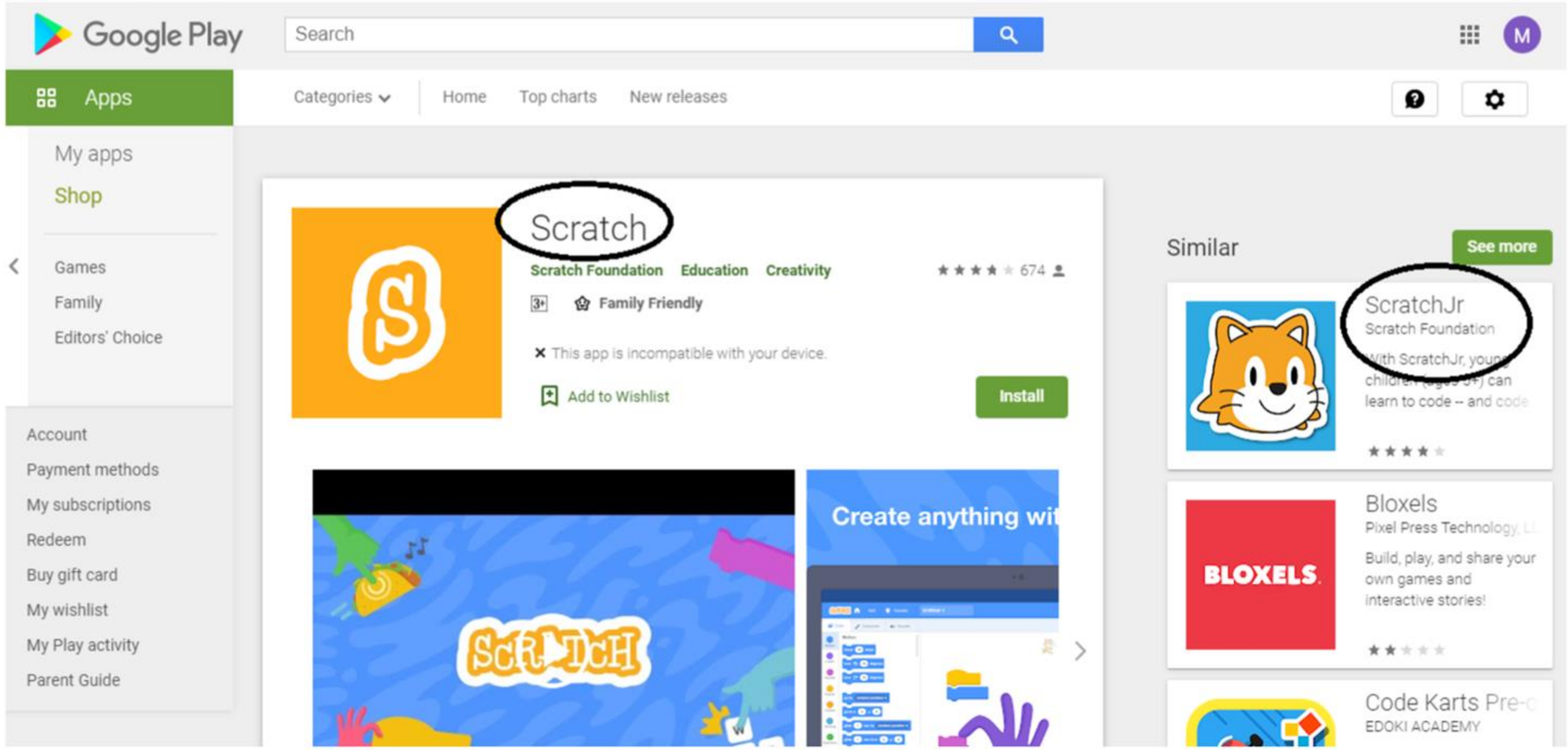
www.scratch.mit.edu/download



Follow the on Screen instructions



Download Scratch or Scratch Junior application for mobile devices



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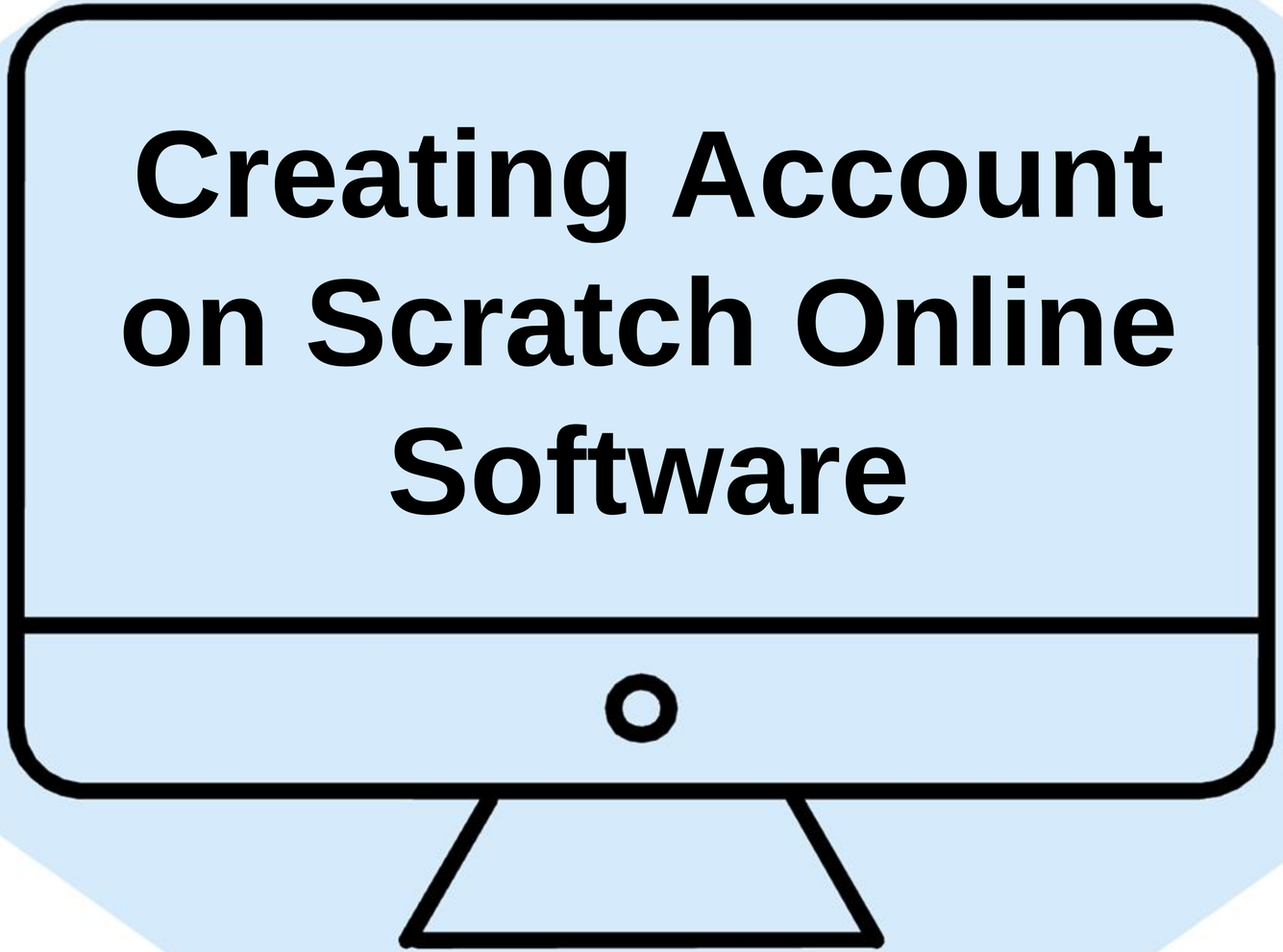
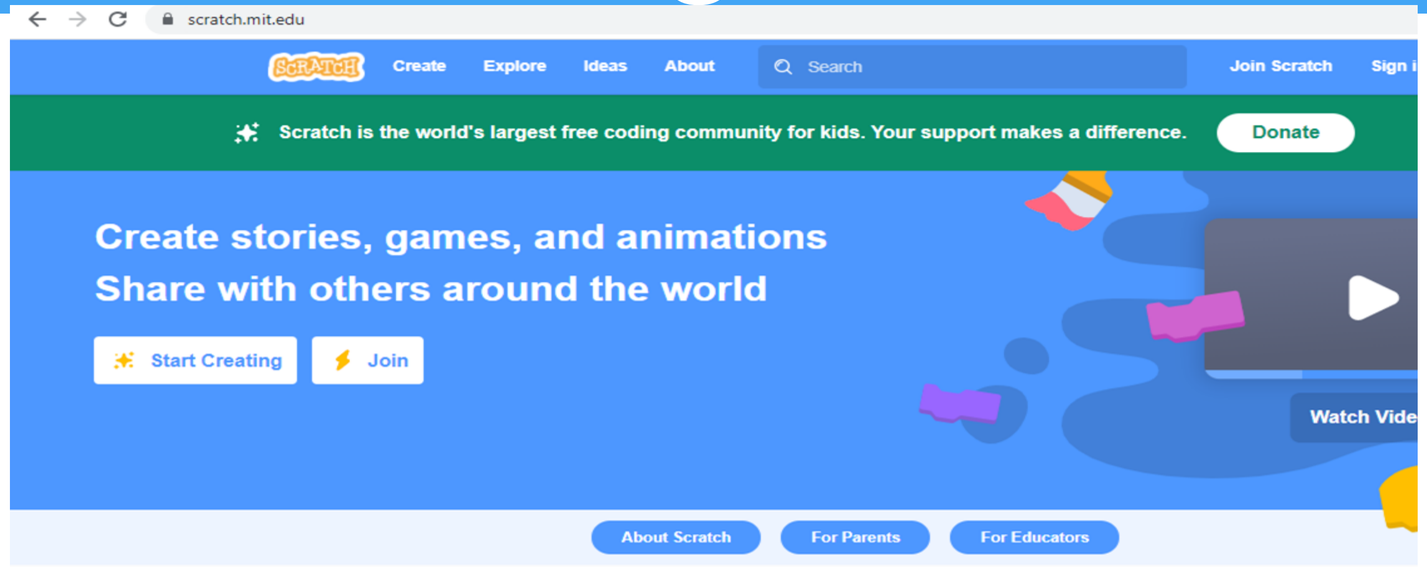
Creating Account on Scratch Online Software



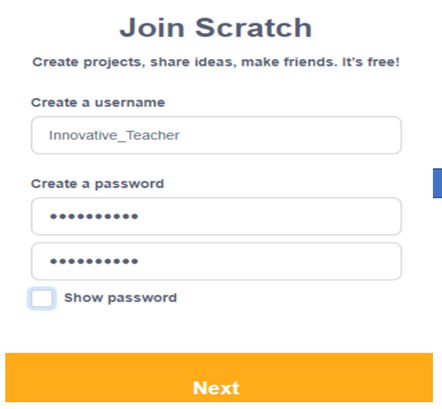
Creating a scratch Account

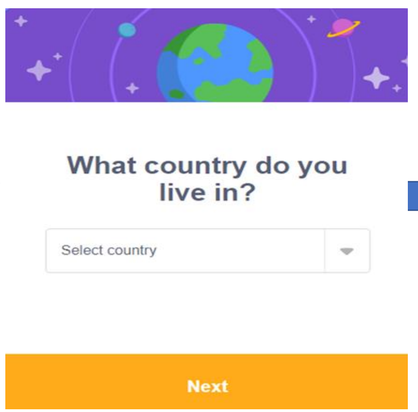


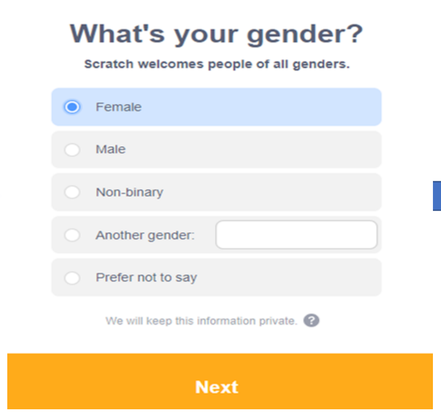
Visit

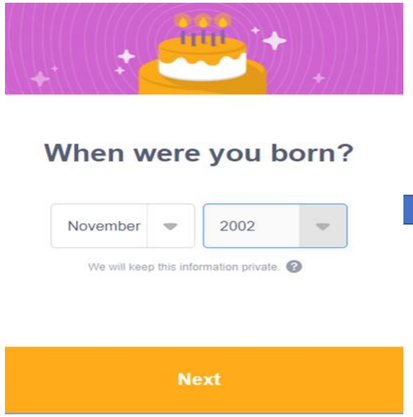
www.scratch.mit.edu

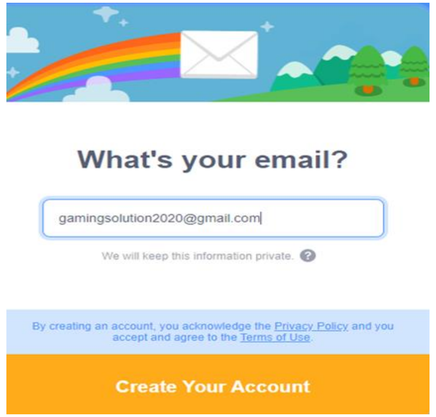
and click on Join Scratch











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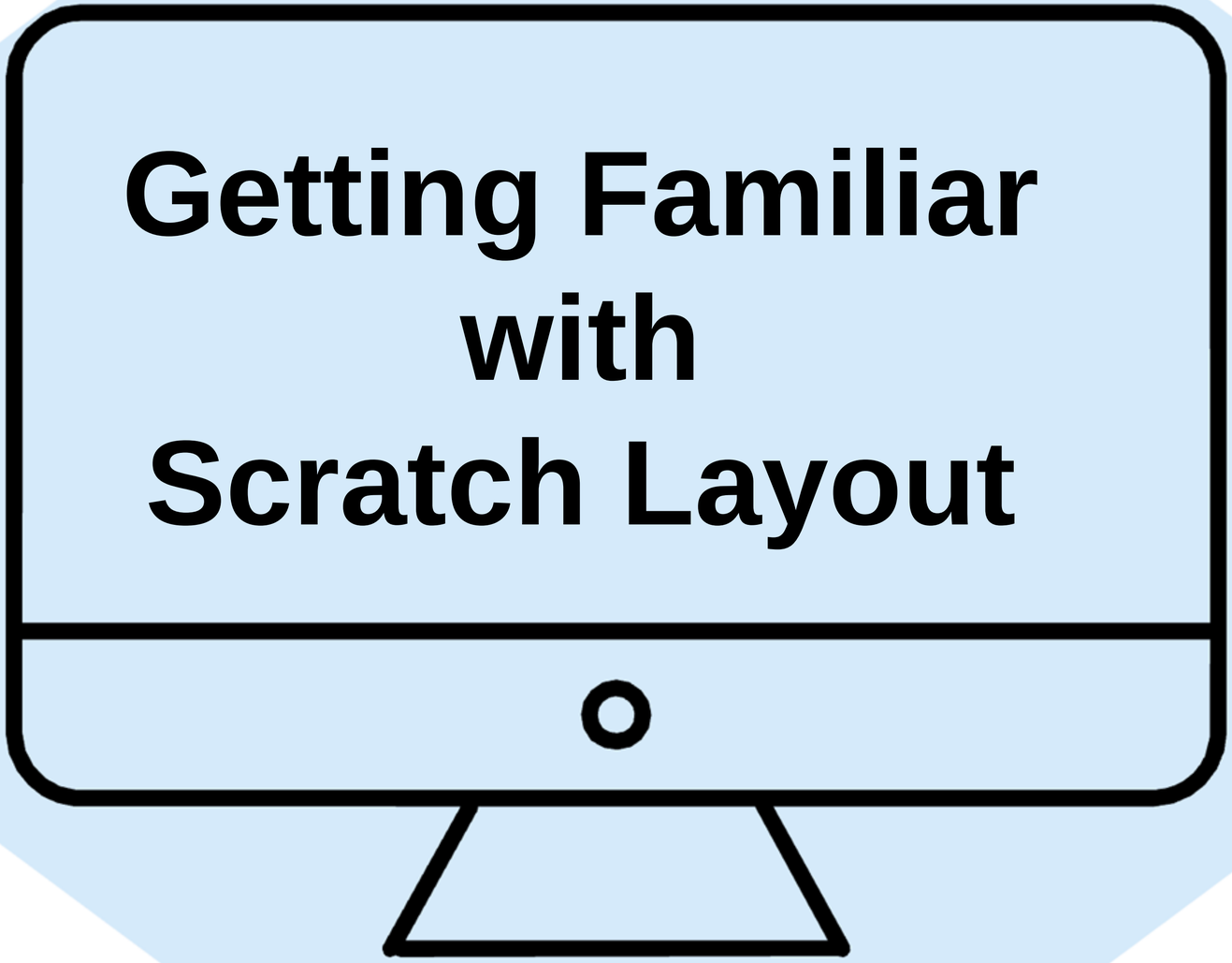
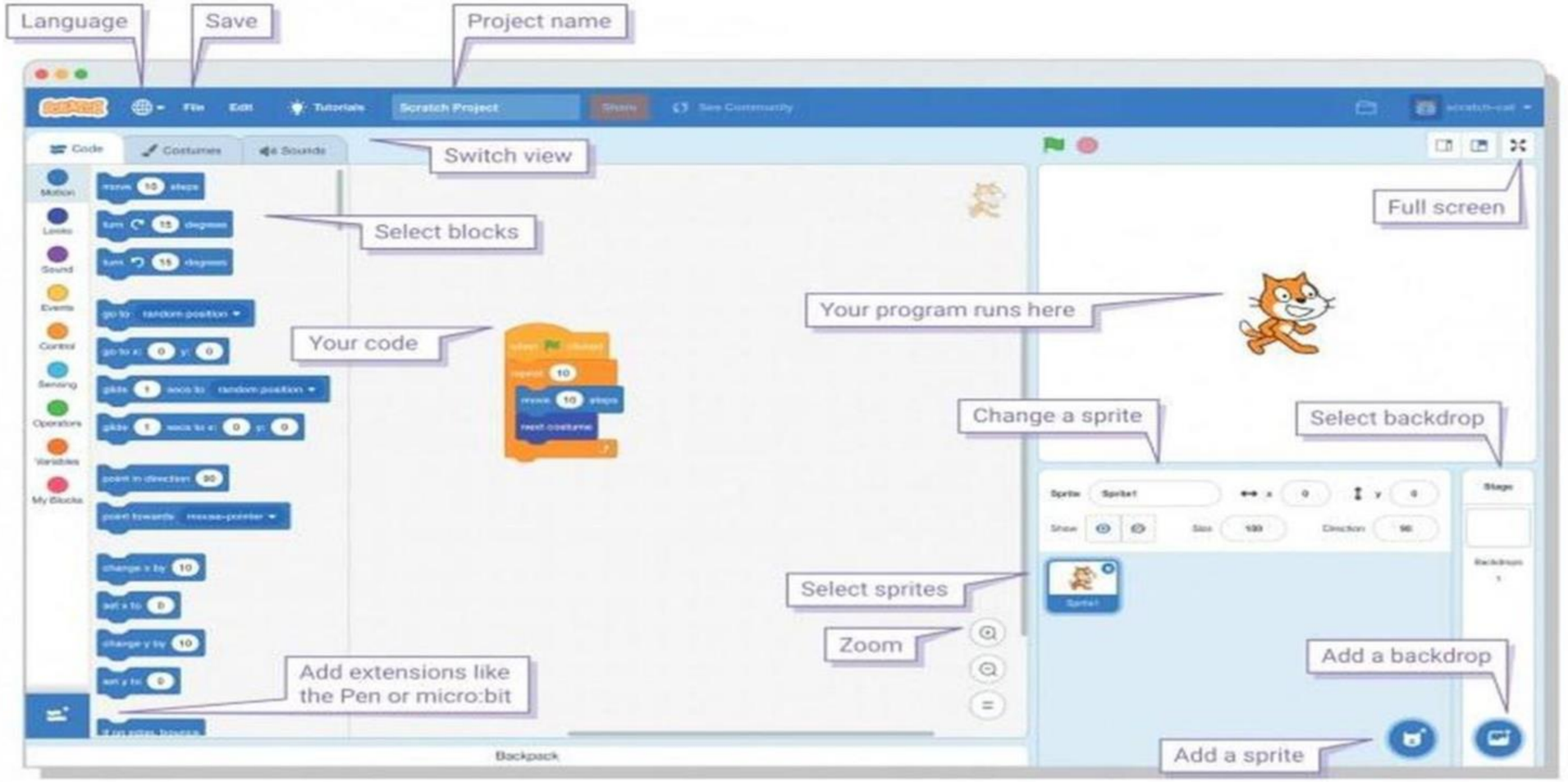
Getting Familiar with Scratch Layout



Explore Scratch Interface



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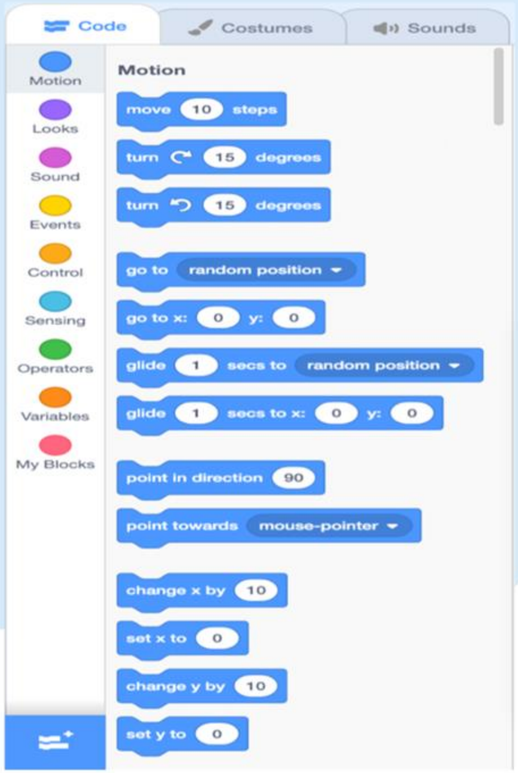
Explore Scratch Interface

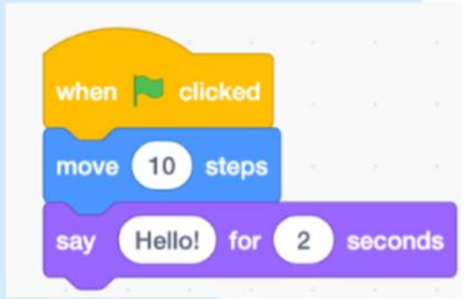
Block Palette

All your coding blocks are here!



Scripts Area

The scripts area is where our code is dragged to and assembled.



Stage Area

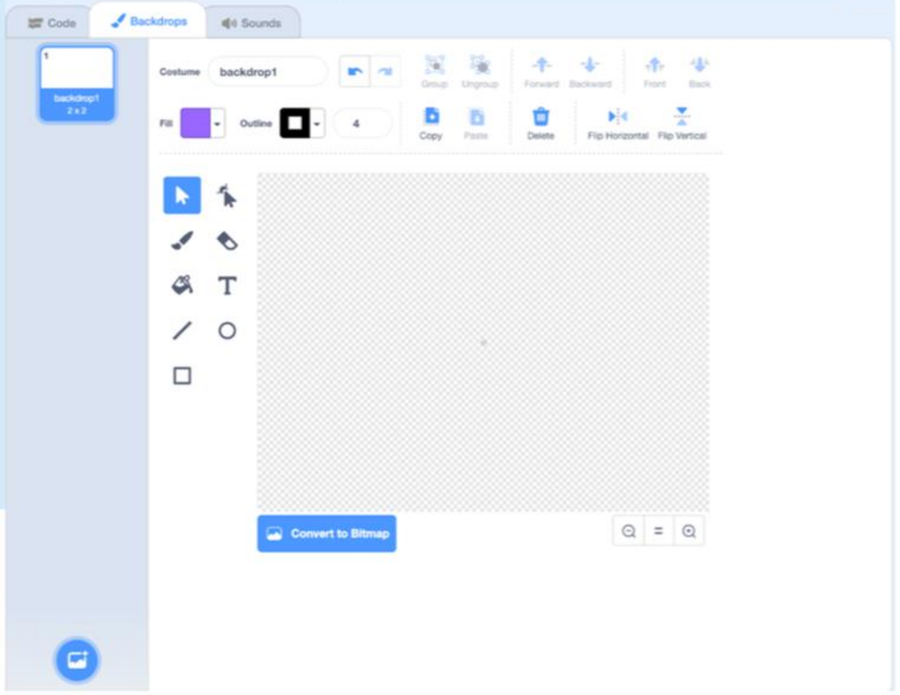
The stage our code comes to life!

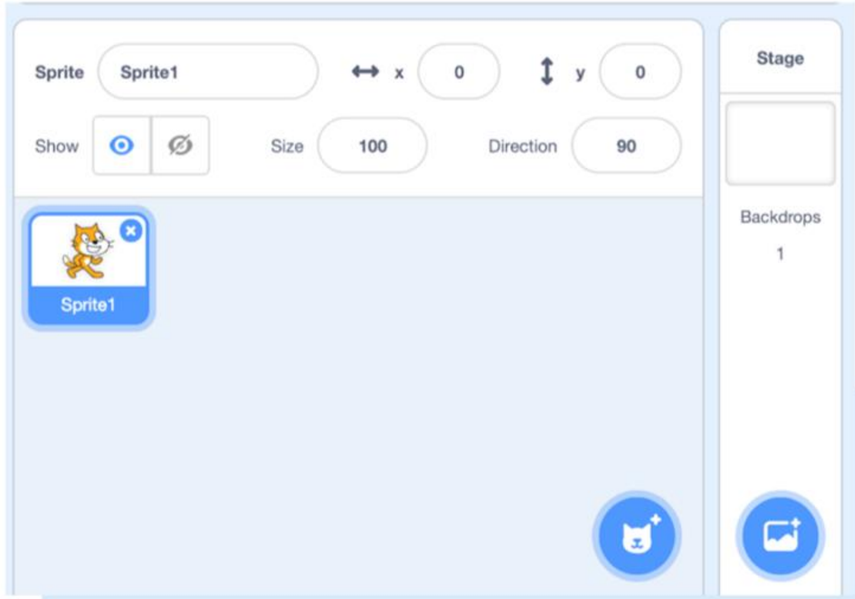
Explore Scratch Interface

Costume & Backdrop Panes

It can be accessed by clicking the middle tab in between the "code" tab and the "sounds" tab.

This is where we can create and manipulate sprites and backdrops.



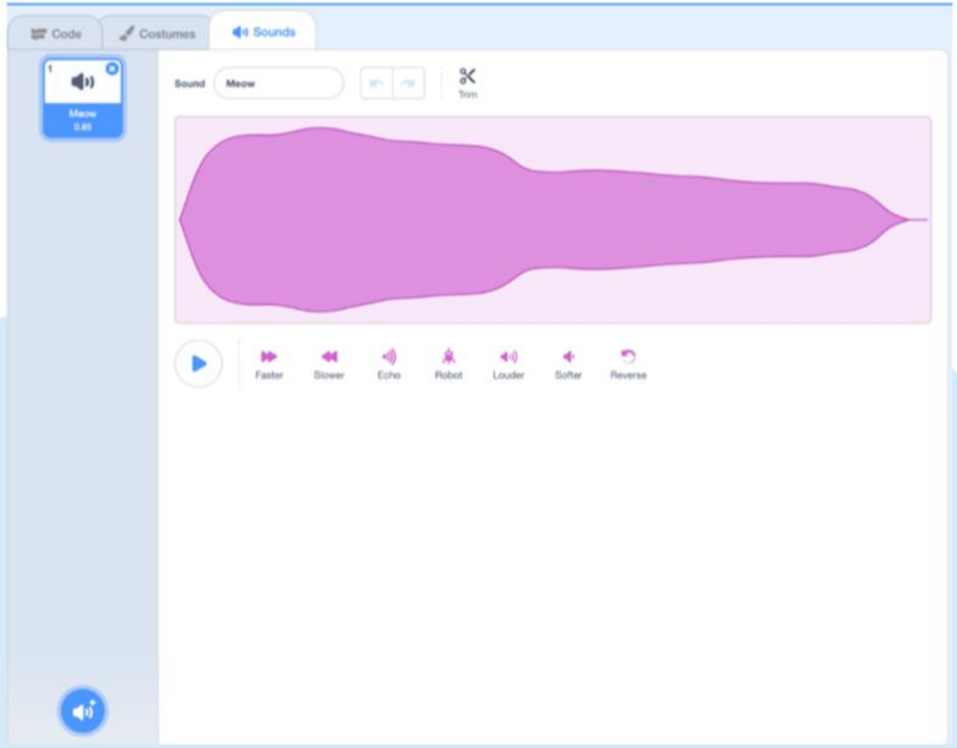


Sprite info pane

This is where we can find info about our sprites as well as manipulate them.

Access this pane by clicking on the thumbnail of the desired sprite. You can also delete and create new sprites.

Explore Scratch Interface



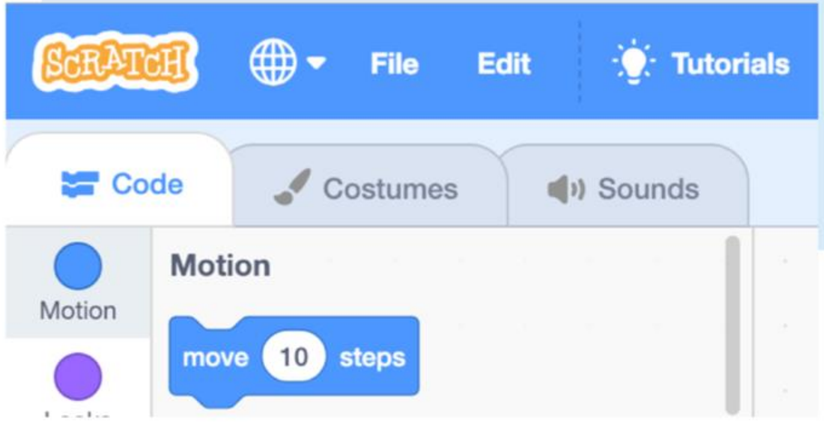
Sounds Pane

The last tab in the top left area of the interface allows us to crate and manipulate sounds.

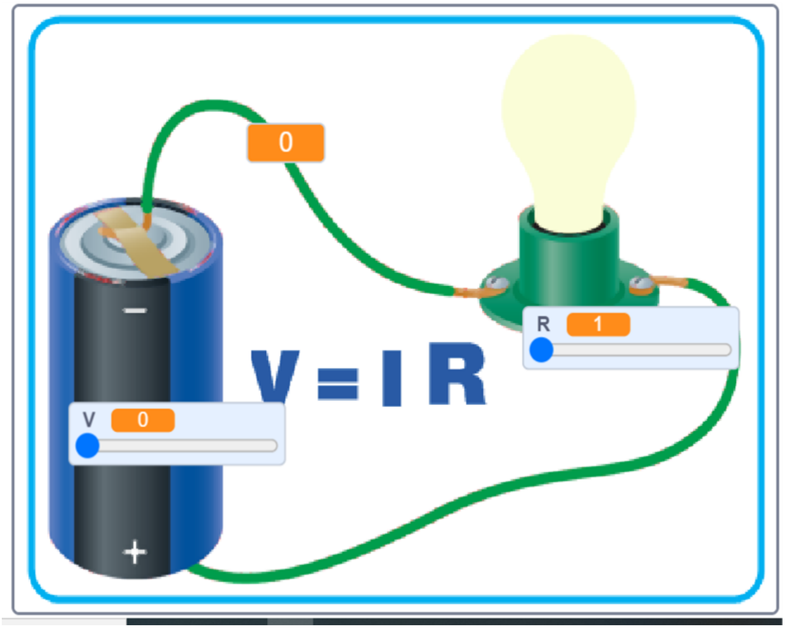
Toolbar and Tutorials

The toolbar on the top of the screen allows us to load/ save projects and undo/redo actions.

You can find tutorials about Scratch by clicking the "tutorials" button.



Sample Scratch



https://scratch.mit.edu/projects/492459233/

https://scratch.mit.edu/projects/427202221/

Assignment of the Day

- Register on Scratch Platform
- Download and install Scratch IDE


Q
&
A

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Thank You!

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