

Year 7 Computing Summer 1: Scratch

Scratch is a programming language which can be used to develop computer games.

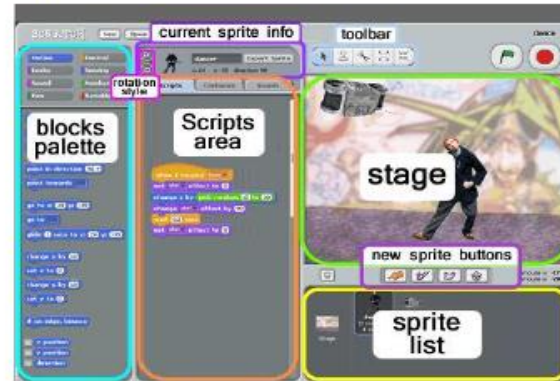
It provides access to over 100 code blocks. These code blocks are organised into eight categories and are made available on the blocks palette.

Each of these categories of code blocks is described below.




- **Motion.** Code blocks that control sprite placement, direction, rotation, and movement.
- **Looks.** Code blocks that affect sprite and background appearance and provide the ability to display text.
- **Sound.** Code blocks that control the playback and volume of musical notes and audio files.
- **Pen.** Code blocks that can be used to draw using different colours and pen sizes.
- **Control.** Code blocks that trigger script execution based on predefined events, repeatedly execute programming logic using loops, and perform conditional logic.
- **Sensing.** Code blocks that can be used to determine the location of the mouse-pointer, its distance from other sprites, and whether a sprite is touching another sprite.
- **Operators.** Code blocks that perform logical comparisons, rounding, and other arithmetic operations.
- **Variables.** Code blocks that can be used to store data used by applications when they execute.





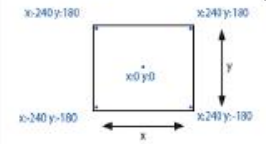
You can view the code blocks belonging to a given category by clicking on one of the eight labelled button controls at the top of the blocks palette. Note that each category of code block is colour coded, making it easy to distinguish between code blocks from different categories.

A typical Scratch interface:



Other useful terms include:

Sprite	An object in Scratch which performs functions controlled by scripts	
Stage	The background of a project, performs functions through scripting	
Scratch Cat	Scratch's mascot and default sprite	

Green Flag	Sometimes simply called the 'flag,' this is what starts most projects' scripts running	
Costumes	Images that are used to represent a sprite on the stage	
Script	A collection of code blocks that outlines the programming logic that influences the operation of a sprite	
Red Stop Sign	The button that usually stops a project	
X__Y__	The coordinates on the stage where you want the sprite to move to	

Did you know that Scratch is freely available and can be accessed from <https://scratch.mit.edu/> where you will find lots of ideas and support ... do take a look

