

# **Coding in Scratch Session**

## **Introduction to Scratch**

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# Scratch

- Created and maintained by MIT Media Lab
- Designed to have:
  - Low floor
  - Wide walls
  - High ceiling
- Free to use
- Moderated community

# Offline vs Online Version

- Online version of Scratch has three main advantages:
  - the Community
  - Teacher Accounts
  - You don't need to install anything on school PCs
- Offline version may be better suited to schools with unreliable or slow internet connections
- We will focus on the online version in this workshop

# The Website

— scratch.mit.edu

The screenshot shows the Scratch website homepage. At the top is a blue navigation bar with the Scratch logo, links for 'Create', 'Explore', 'Tips', and 'About', a search bar, and links for 'Join Scratch' and 'Sign in'. Below the navigation bar, the main heading reads 'Create stories, games, and animations' and 'Share with others around the world'. Three circular buttons are displayed: 'TRY IT OUT' with the Scratch cat, 'SEE EXAMPLES' with a blue character, and 'JOIN SCRATCH (it's free)' with a yellow character. To the right is a preview of a Scratch script: 'when green flag clicked', 'repeat 10', 'move 10 steps', 'change color effect by 25', 'play drum 4 for 0.2 beats', and 'say Welcome to Scratch! for 2 secs'. Below this, it states 'A creative learning community with 25,129,434 projects shared' and provides links for 'ABOUT SCRATCH', 'FOR EDUCATORS', and 'FOR PARENTS'. The 'Featured Projects' section at the bottom displays five project thumbnails: 'Geometrical spiral' by girlscanprogram, '~O~ PUMPKIN CAR' by dapple-grey-horse, 'Night town' by sei26, '-Dragon Creator -' by Darnarys, and 'The Mage [space]' by Viking89.

# **The Website**

- Try it Out / Create**
- See Examples / Explore**
- Featured Projects**
- Join Scratch**

# **Type of Accounts**

- **Normal Account**
- **Student Accounts**
- **Teacher Accounts**

# Palettes and Panes

- **Block Palette**

- *Scripts* tab

- Blocks are grouped by functionality

- Colours indicate the type of block (for example: all *motion* blocks are blue)

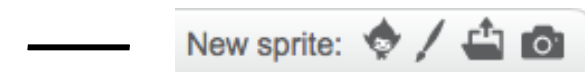


# Palettes and Panes

## — Scripts Area

- This is where blocks are placed to create *scripts*
- Each *Sprite* has a different *Scripts Area*

## — Sprites Pane



- Blue highlight = *Sprite* is selected

# Palettes and Panes

## — **Costume Pane**

- Also referred to as the *Costume* tab
- Each *Sprite* can have 1 or more *Costumes*

## — **Sounds Pane**

- A list of audio clips for the *Sprite*
- Could be sound effects (for example: a dog barking) or background music

# Stage

- Also referred to as the *Canvas*
- Has two buttons:
  - *Green Flag*
  - *Stop Sign*
- Has its own *Script* area
  - Blocks available to *Stage* differ to those available for *Sprites*

# Toolbar

— There is a *Toolbar* at the top of the *Scratch* interface.



— A couple of examples that will be useful for this workshop:

— *File > Upload from your computer*

— *Edit > Undelete*

# Summary

- In this presentation I have:
  - Introduced you to *Scratch*
  - Compared the Offline and Online versions of *Scratch*
  - Explained what the main parts of the *Scratch* homepage are
  - Briefly described the 3 types of *Scratch* accounts
  - Showed you the main parts of the *Scratch* interface
- **Any questions?**