

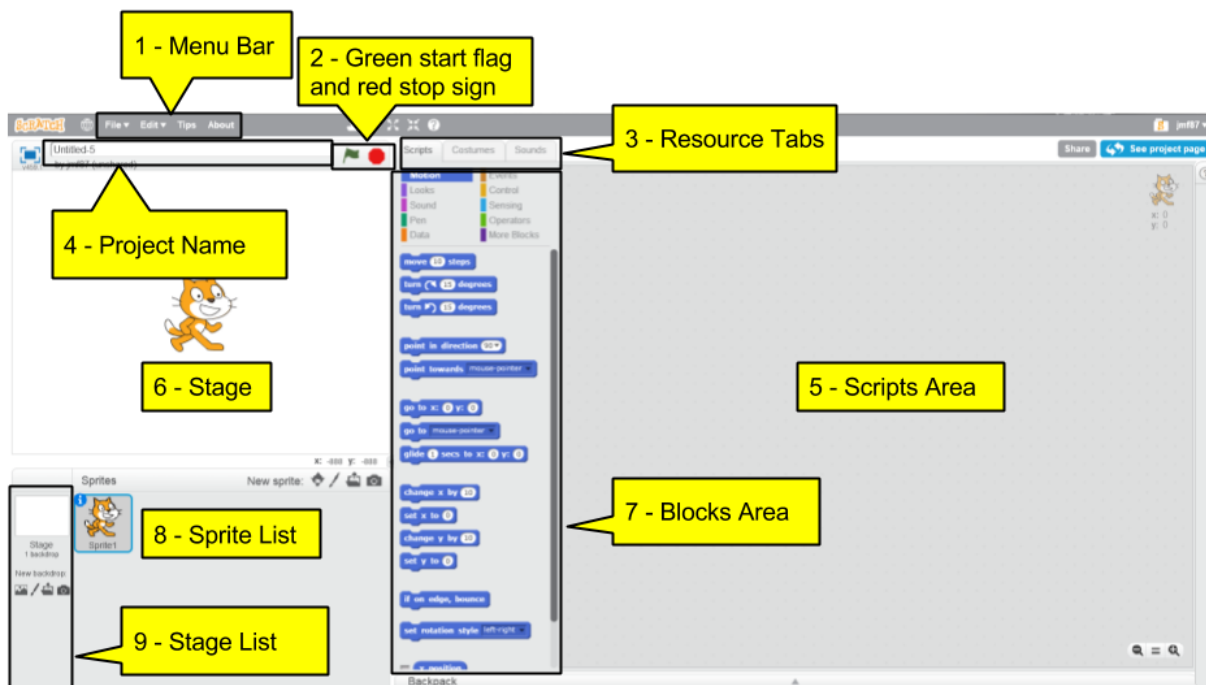
Lesson 0 - Getting Started

1. Running Scratch

- go to <https://scratch.mit.edu/>.
- You don't need to create an account to use Scratch, but you won't be able to save your work online. Creating an account is free.
 - Click **Join Scratch** and follow the directions to finish creating your account.
- You can also download the offline editor, which allows you to program in Scratch without being connected to the internet.
 - You can download the offline editor from: <https://scratch.mit.edu/download>, or by selecting the **Offline Editor** link at the bottom of the Scratch homepage (under **Support**).

2. Getting Familiar with the Editor

- Open the Scratch editor by clicking the **Create** link at the top of the page.
- The editor is laid out as shown in the following figure:



- The **Menu Bar (1)** can be used to create new, save, and download your work. The Editor Edit, Tips, and About buttons can also be found here.
- The **Green Start Flag** and **Red Stop Sign (2)** are used to start and stop running your project.
- The **Resource Tabs (3)** can be used to select the part of the program you want to edit (e.g. scripts, Sprite costumes, backgrounds, or sounds).
- The **Project Name (4)** can be added to this space.

- v. The **Scripts Area (5)** is used to assemble your script blocks into working code.
- vi. The **Stage (6)** is where you will see your Sprites in motion when you run your program.
- vii. The **Blocks Area (7)** is where you can find script blocks to drag to the Scripts Area. Different color-coded categories of blocks can be selected at the top of the Blocks Area.
- viii. The **Sprite List (8)** will contain all the sprites you add to your project. Tools for adding and editing Sprites can be found in the top right corner of the Sprite List box.
- ix. The **Stage List (9)** can be used to select and edit the details of the Stage.

3. Programming with Code Blocks

- a. Programming in Scratch is done by snapping together code blocks.
 - i. To create code, select a code block in the Blocks Area and drag it to the Scripts Area.
 - ii. A code block can be snapped to another by dragging it close to the bottom of the existing block and releasing it when a white outline appears. The blocks will be connected. Blocks with a notch on top and a bump on the bottom are called **stack** blocks and can be connected in this way.
 - iii. You can place stack blocks in the middle of other, already connected blocks by dragging the new block in between the existing blocks and releasing when the white outline appears. New blocks will always be added to the script where the white outline appears.
 - iv. You can enter input into white fields inside blocks by clicking the white area and typing. The rectangular fields are for text and the rounded fields are for numbers.
 - v. Rounded code blocks, called **reporter** blocks, can be dragged and inserted into white fields. Just drag the reporter block close to the white field in an existing block and release when the white outline appears around the field space.
- b. Remove blocks of code by simply dragging them out of the script.
 - i. If you remove a stack block, all the connected blocks beneath it will also be removed.
 - 1. If you want to keep some of the connected blocks, first set the stack back down in the scripts area.
 - 2. Select the stack that you want to keep and drag it back to reattach to your block code.
 - ii. Delete any unwanted scripts by right-clicking the script and selecting **delete** or by dragging it into the blocks area.
 - 1. Any attached blocks will also be deleted.
 - 2. You can undo a deletion by selecting **edit** on the menu bar, then **undelete**.
- c. You can run your program by clicking the green flag at the top of the stage.

- i. Programs will run from the top code block and work their way down the connected blocks.
 - ii. Separate script blocks will run simultaneously.
 - iii. You can run individual scripts or blocks of code by double clicking them.
- 4. You're ready!
 - a. There are many other features of Scratch to explore, but this lesson should show enough of the basics to get started.