Jellyfish Swimming

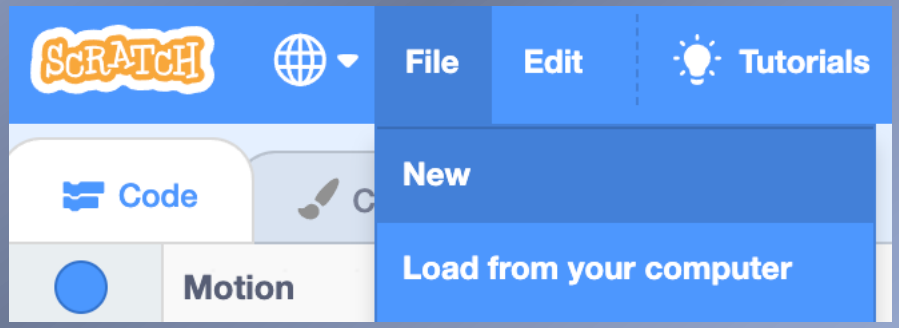
USC Aiken | Ruth Patrick Science Education Center

Infusing a love for Science, Technology, Engineering and Math

Create a project where you can help your jellyfish swim underwater.

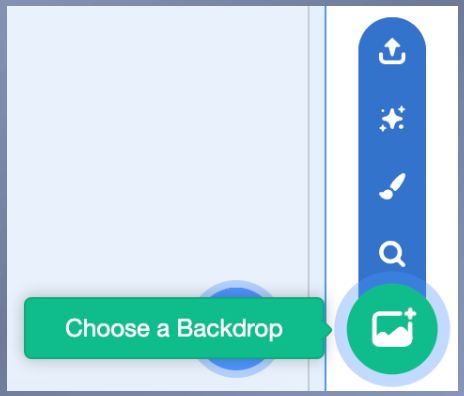
Getting Started

- Open Scratch
- Click on File at the top left of the screen
- Choose New from the drop-down menu

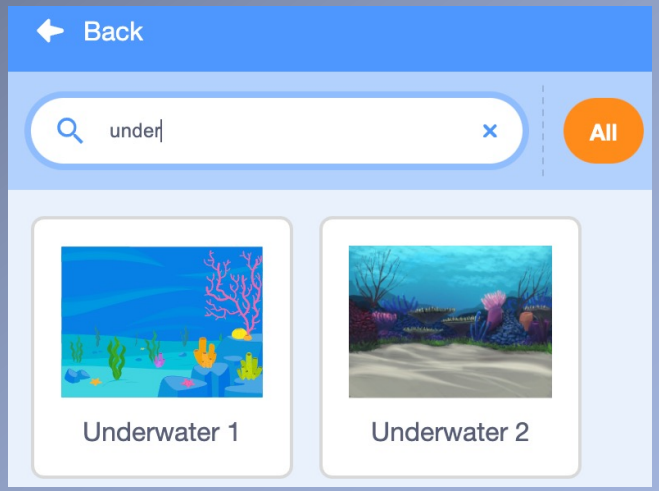


Choose a Backdrop

- Click on the Choose a Backdrop menu on the bottom right of the screen.

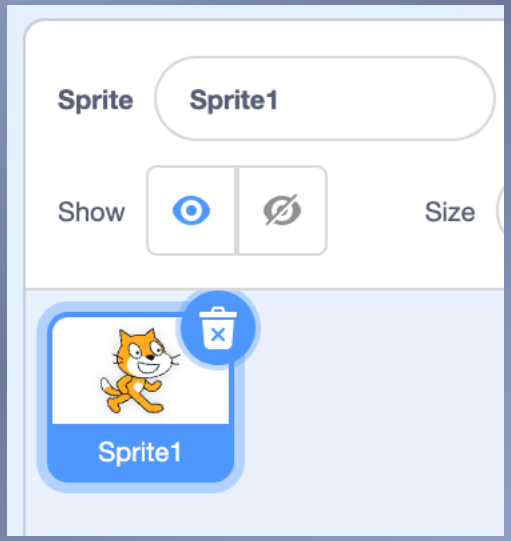


- In the search field, key “under” and then choose Underwater 1.



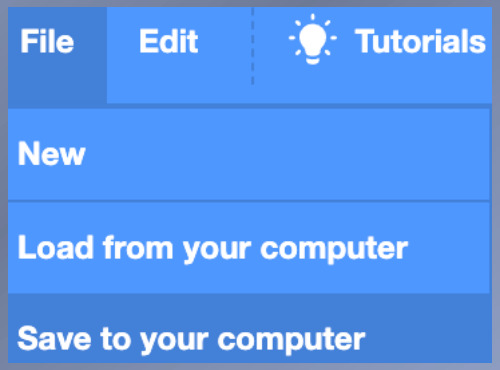
Remove Scratch Cat Sprite

- We will not use Scratch the Cat, so click the Garbage Can with the X.



Save Your Project

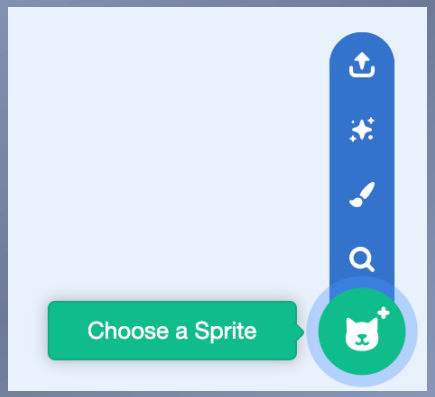
- Save Jellyfish Swimming
  - Chose File then Save to your computer.



  - Change the name (starting with your last name) to
    - *Patrick* Jellyfish Swimming.sb3
  - Click Save.

Add Jellyfish Sprite

- Add a new sprite by clicking on the Choose a Sprite icon at the bottom right.

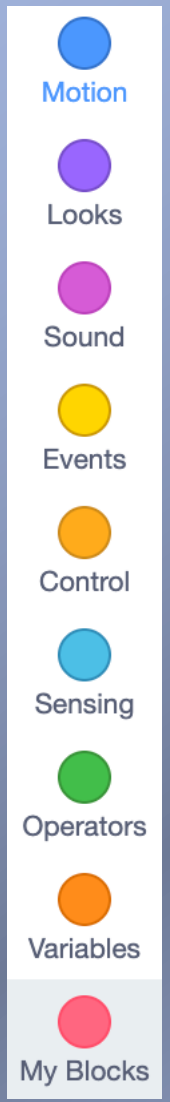


- Key “Jelly” into the search bar and click the Jellyfish sprite.

Resize your Jellyfish

- The jellyfish is a bit too large for this project. Change the size from “100” to “44.”

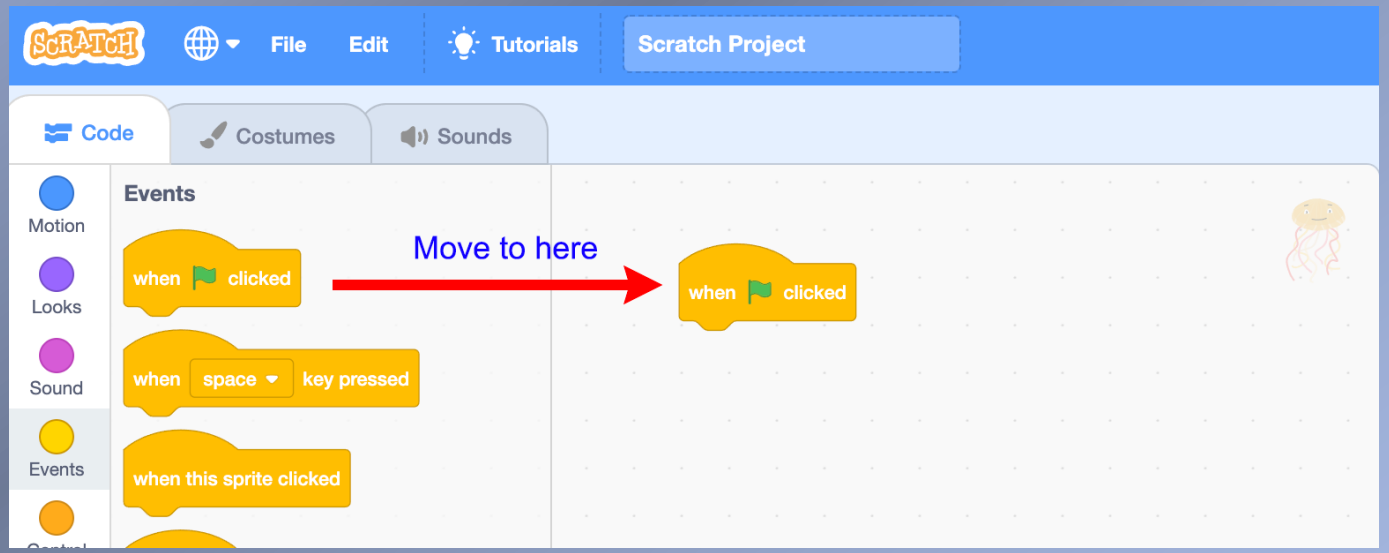
Code Blocks - Code Tab



- Code blocks allow you to control your scene.
- Be sure to be in the Code tab. The sections of code are separated by “function” and “color.”

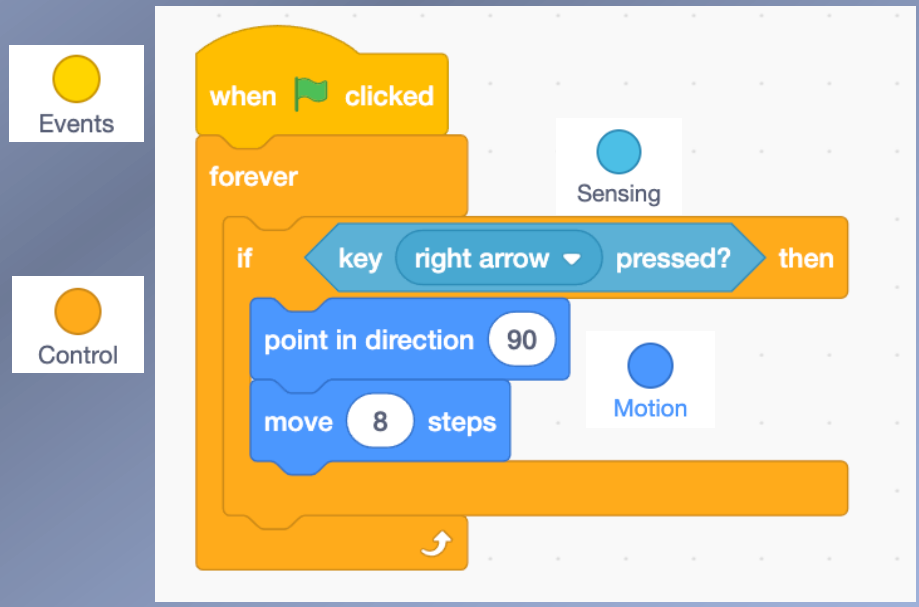
Coding the Sprite

- Scratch Coding almost always starts with the “When Flag Clicked” block.
- In the Events section move the When Flag Click block to the stage.

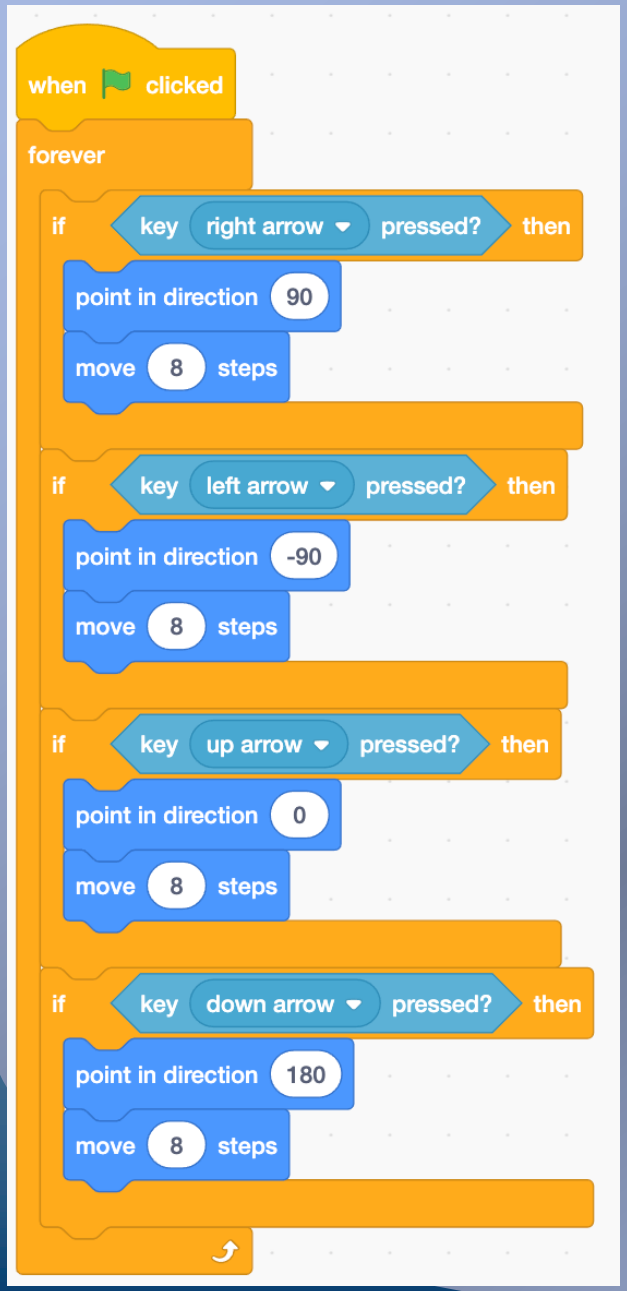


Making your Jellyfish Move

- Drag blocks to look like this. The color of the blocks will help you find the function section.
- Change:
  - Key = right arrow
  - Point in = 90
  - Move 8 Steps



- Test result by clicking on the Flag

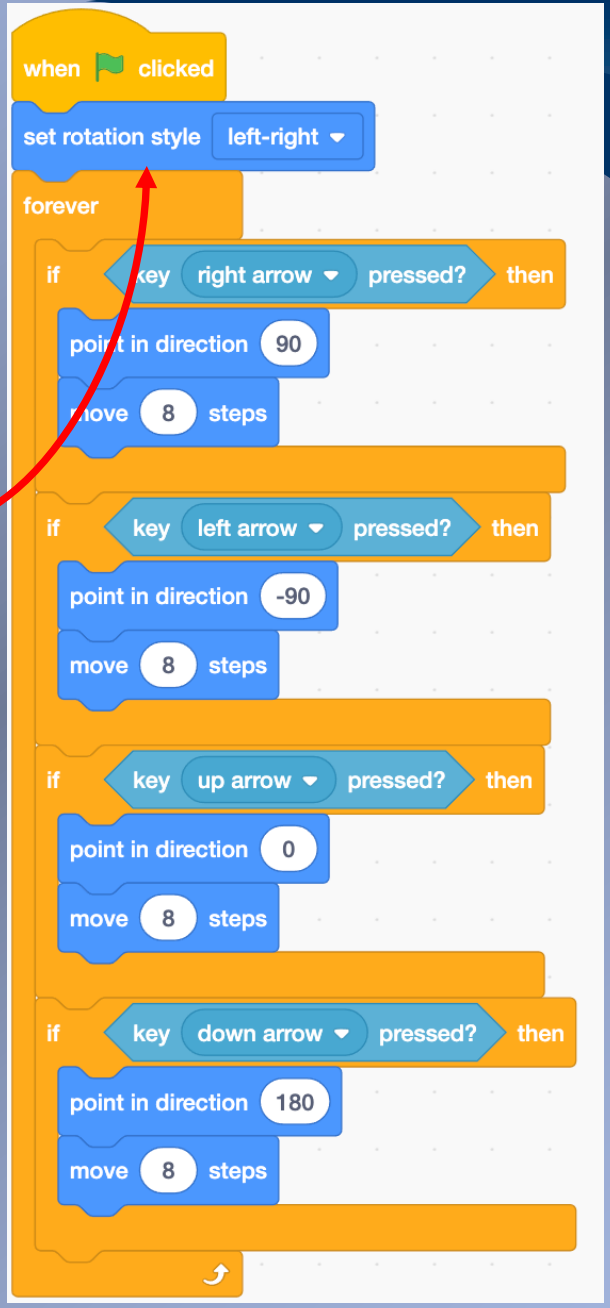


Move in Every Direction

- Build these code blocks
- **Notice**:
  - One If block for each arrow direction pressed
  - Point in direction matches arrow key
  - Each key move 8 steps
- Test result

Set Rotation Style

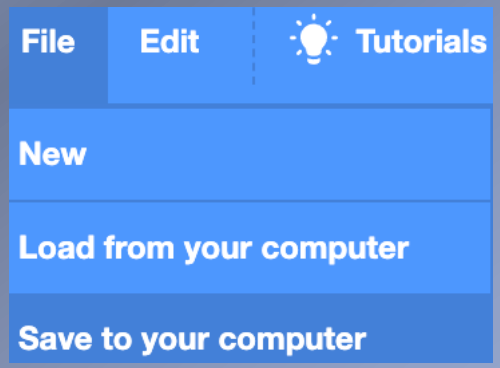
- What did you notice about your jellyfish when it moved?
- Add the Set Rotation Style block

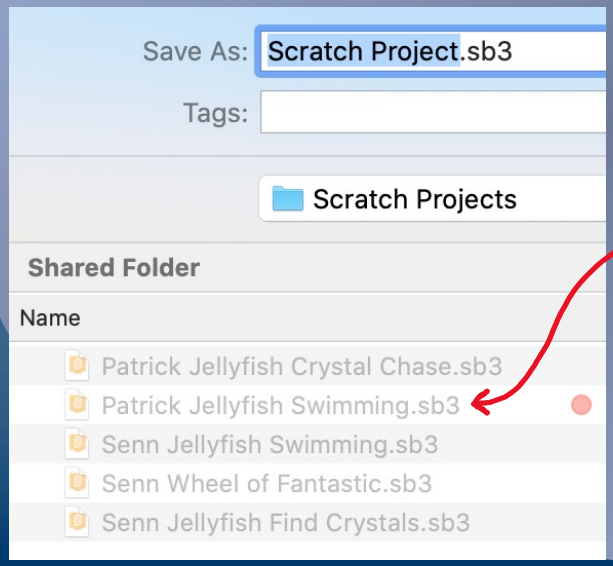


- Test result

Well done!

- Once you complete your swimming jellyfish project, you can turn this project into a game.
- Save your project
  - Chose File then Save to your computer.





  - Click on the name that you saved earlier
  - Click Save then click Replace.