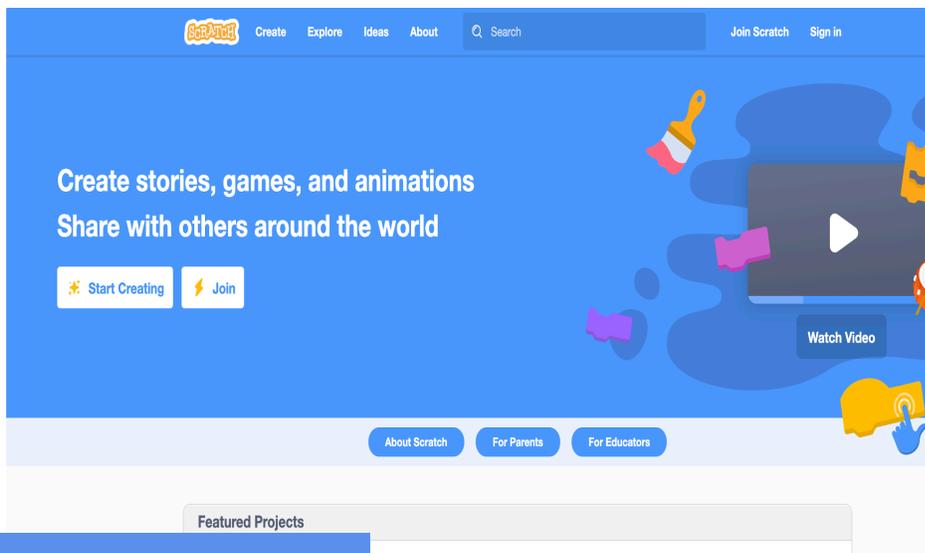


Pacific MESA Coding Activity Week 6 - Catch Me If You Can

Scratch: <https://scratch.mit.edu/>

Scratch is a unique programming language that uses block-based coding to act as an introduction to basic coding. Users can create projects ranging from arcade games to storytelling. Scratch was invented by the MIT Media Lab and has been translated into 70+ languages and is frequently used in the world.

Creating an account:



Use the link above and click “Join Scratch” at the top right corner.

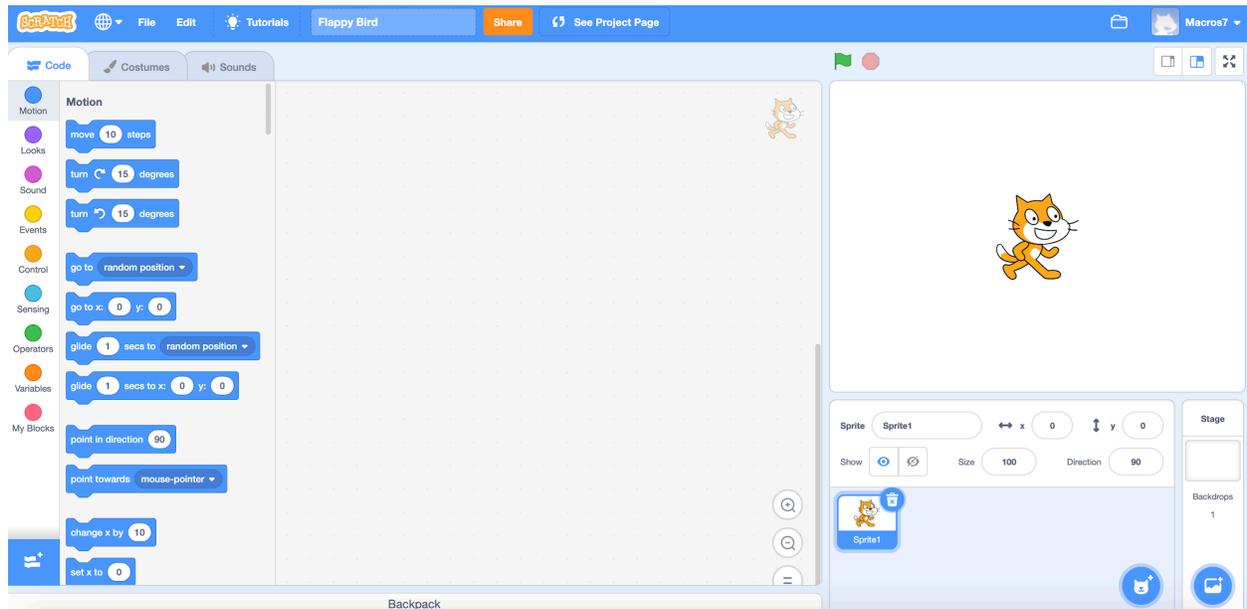
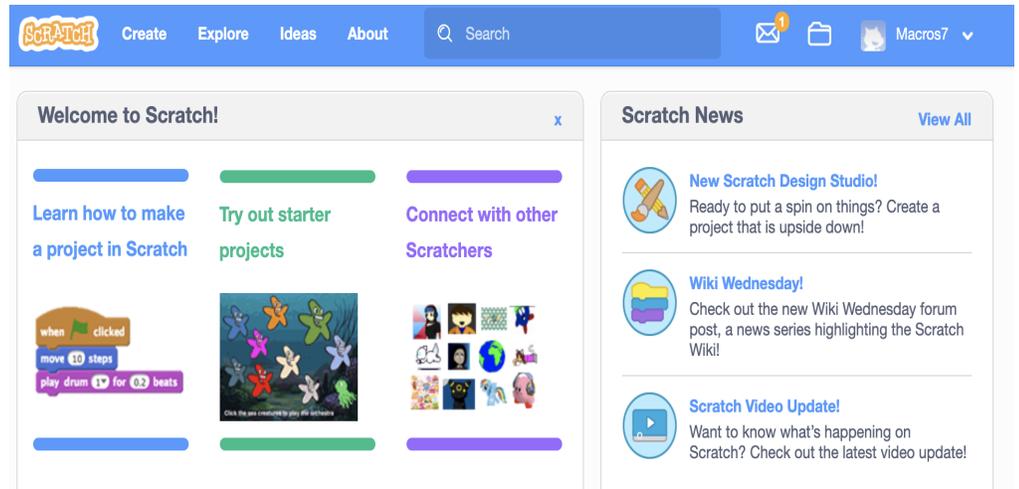
A screenshot of the Scratch 'Join Scratch' registration form. The form is titled 'Join Scratch' and includes the text 'Create projects, share ideas, make friends. It's free!'. It contains three input fields: 'Create a username' with a placeholder 'Username', 'Create a password' with a placeholder 'Password', and 'Type password again' with a placeholder 'Type password again'. There is a checked checkbox labeled 'Show password'. At the bottom of the form is a large orange button labeled 'Next'.

You will then see this screen where you'll need to input your information like email, password, etc.

Follow the instructions accordingly.

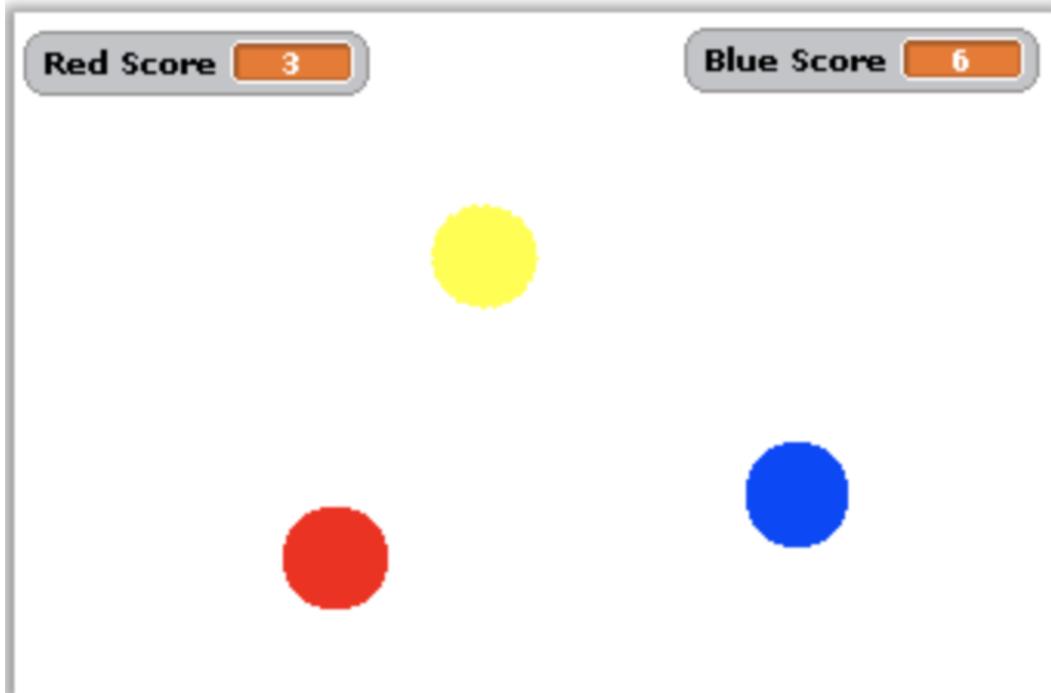
Once you have your account setup, login, and then press the “Create” button on the top left corner to begin the project.

You should see a screen similar to the one below. Feel free to rename it “Space Invaders” at the top.



Catch Me If You Can Game:

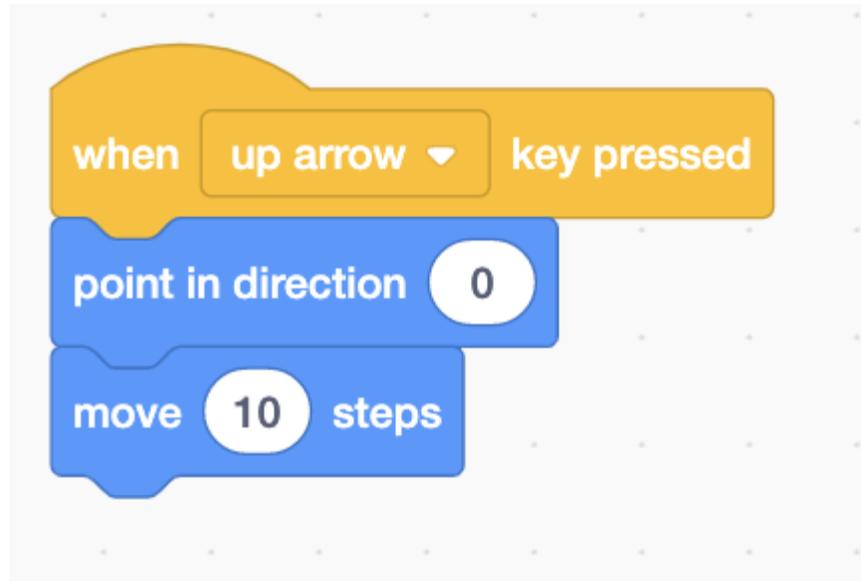
Description: One player will be the yellow ball and they will be chased by the red and blue ball (two other players). The red player will use arrow keys to move around. The blue player will use “WASD” keys to move and the yellow player will use the mouse pointer to move.



If you get stuck at any step you can see an example of this game at <https://scratch.mit.edu/projects/391509153>. You can see the coding by selecting “see inside”. This challenge starts getting difficult around step 4, but see if you can get that far without help! Good luck.

Step 1: Red Ball

- Create a red ball sprite by clicking the paint option when you hover over the “Choose a Sprite” button
- Add code to the red ball sprite to make it move using the **arrow keys**
- Move the ball 10 steps in each direction
- Your code should look similar to this for each direction:



Step 2: Blue Ball

- Create a blue ball sprite
- Add code to it to make it move using **“WASD” keys**
 - W is for up
 - S is for down
 - A is for left
 - D is for right
- Move the ball 10 steps in each direction

Step 3: Variables

- Add a “Red Score” and “Blue Score” variable to keep track of points

Step 4: Yellow Ball

- Create a yellow ball sprite
- Add code to it to make it move using the **mouse pointer**
 - Hint: Try using a forever block and the point towards block to solve this
- Add code so the ball can detect if it has been caught by either the red or blue ball
 - Take advantage of the Sensing blocks to accomplish this

- Once it collides with a ball, make the yellow ball reset in a **random** location on the screen

Step 5: Scoring

- Add a point to the ball that hit the yellow ball
 - This code should be in the yellow ball's coding section

Running the game:

- Press the green flag at the top of your project to run your game
- Have fun!

Receiving MESA Credit:

Congratulations on your game! In order to share a link to your game, you will have confirm your account. To do this go to the email that you used to sign up for scratch and open the email titled "Confirm your Scratch account" and select the button "confirm my account". Inside your project you will see a button that says "See project page". From this page there is another button that says "copy link" in the bottom right corner. Use that to copy the link!

Submit the link to: <https://pacificmesaonline.wufoo.com/forms/z4khp6h1jucyn/>

If you are not able to find a link you may submit a screenshot that includes your login name at the upper right hand corner.