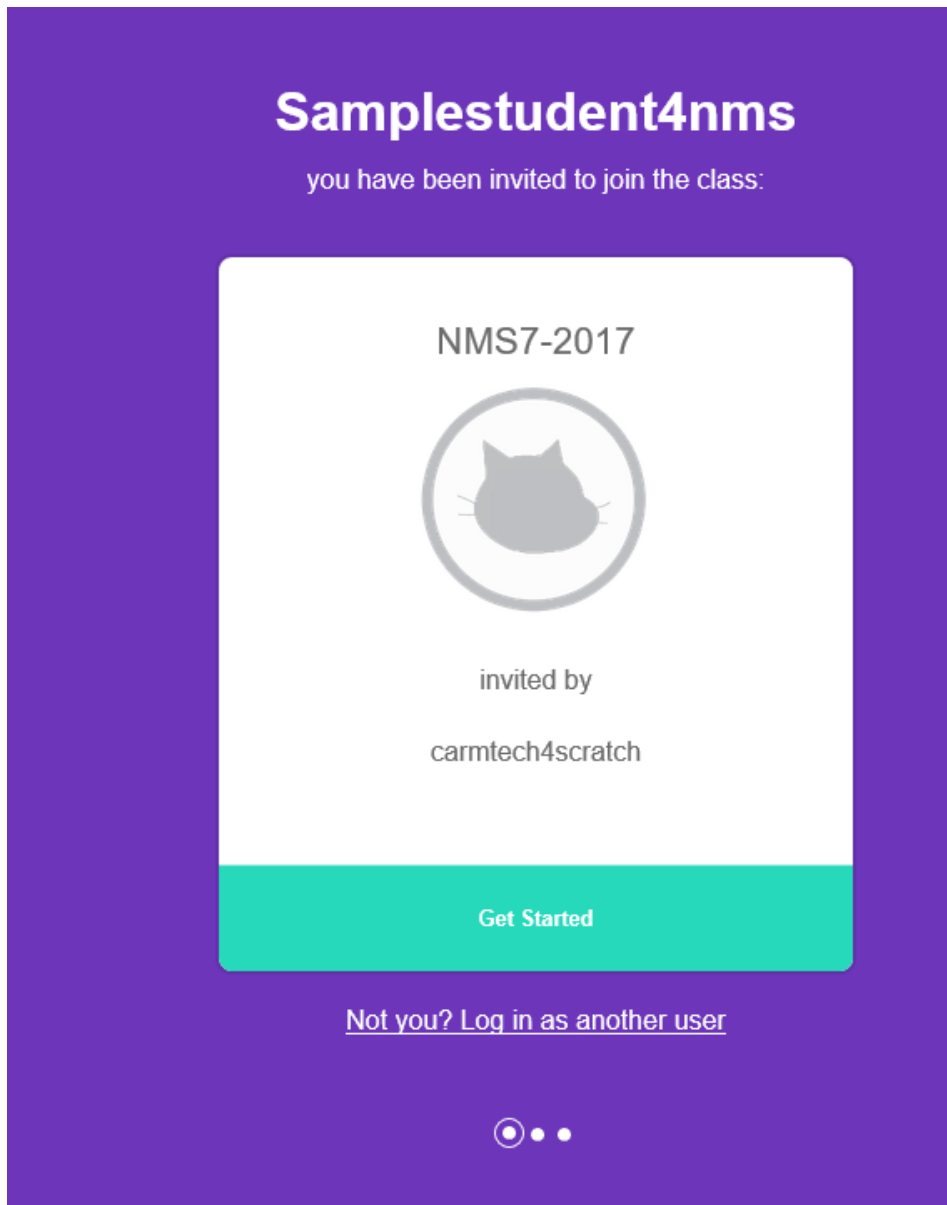


Intro to Scratch  
Nackawic Middle School  
December 2017  
Mr. Desjardins

# Google the word "Scratch"

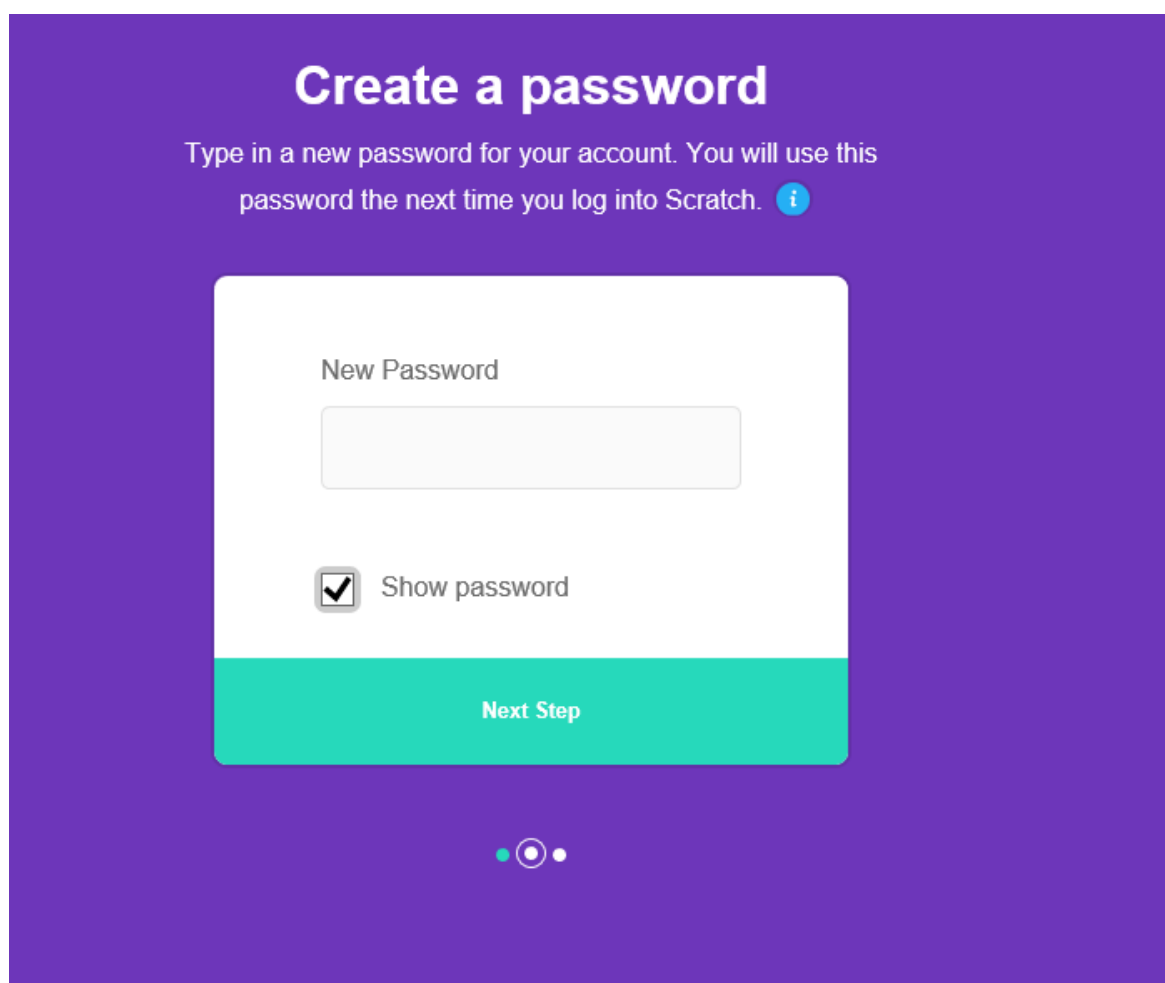
The image shows a Google search interface. The search bar contains the word "scratch". Below the search bar, there are tabs for "All", "Images", "Videos", "Maps", "News", and "More". The "All" tab is selected. Below the tabs, it says "About 292,000,000 results (0.68 seconds)". The first search result is "Scratch - Imagine, Program, Share" with the URL "https://scratch.mit.edu/". This result is circled in red. Below this result, there are several other links: "My Stuff - Scratch - Imagine ...", "Offline Editor", "Explore", "Messages", "About", "Scratch Login", and "More results from mit.edu ». At the bottom, there is a section for "Scratch Team (@scratch) · Twitter" with a link to "https://twitter.com/scratch". Below this, there are three columns of text: "We're hiring designers!", "Create your own interactive holiday cards with Scratch!", and a quote: "Wait, are you telling me that I can draw my own picture and program it to do things?"

## Sign in (top right)



You can create your own password now.

Hint: Use same password you use to access your computer.



**Create a password**

Type in a new password for your account. You will use this password the next time you log into Scratch. [i](#)

New Password


Show password

Next Step


• ● •

## Only put Gender and Country


**Personal Information**

This information will not appear on the Scratch website. 

Birth Month

January 


Birth Year

2017 

Gender

Female  Male

Country

select country 

Next Step

# Hurray! Welcome to Scratch!

You have successfully set up a Scratch account! You are now a member of the class:

NMS7-2017



To get started, click on the button below.

[Go to Class](#)

## Simple Race Game Demo

2 different sprites

Similar scripts for each sprite.

**EVENTS**--> "When \_\_\_key pressed"

**Motion**--> "Move \_\_\_ steps"

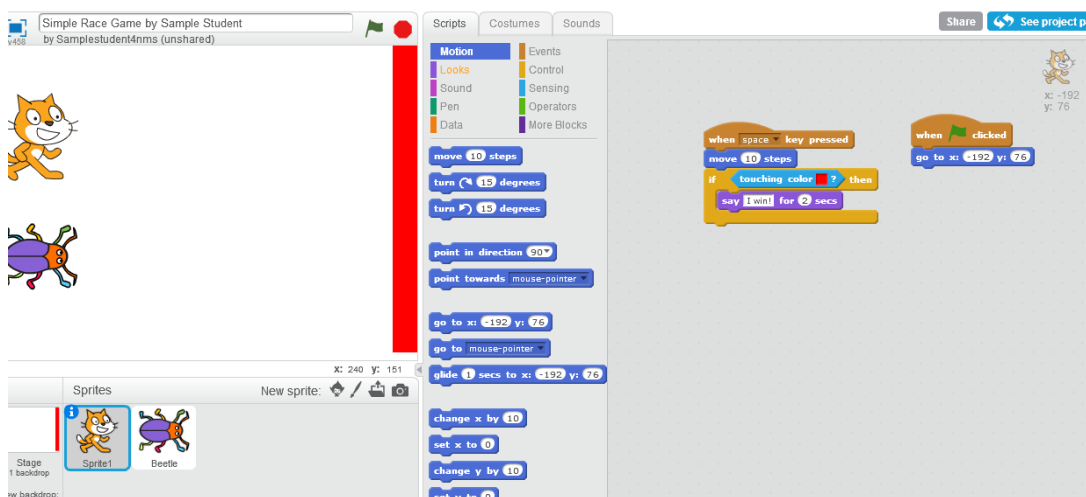
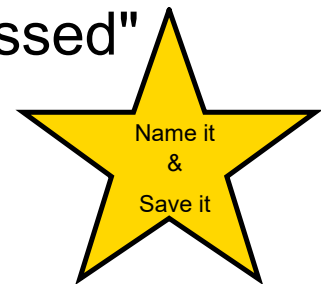
**Control** --> "If \_\_\_ then"

**Sensing** --> "touching color \_\_\_"

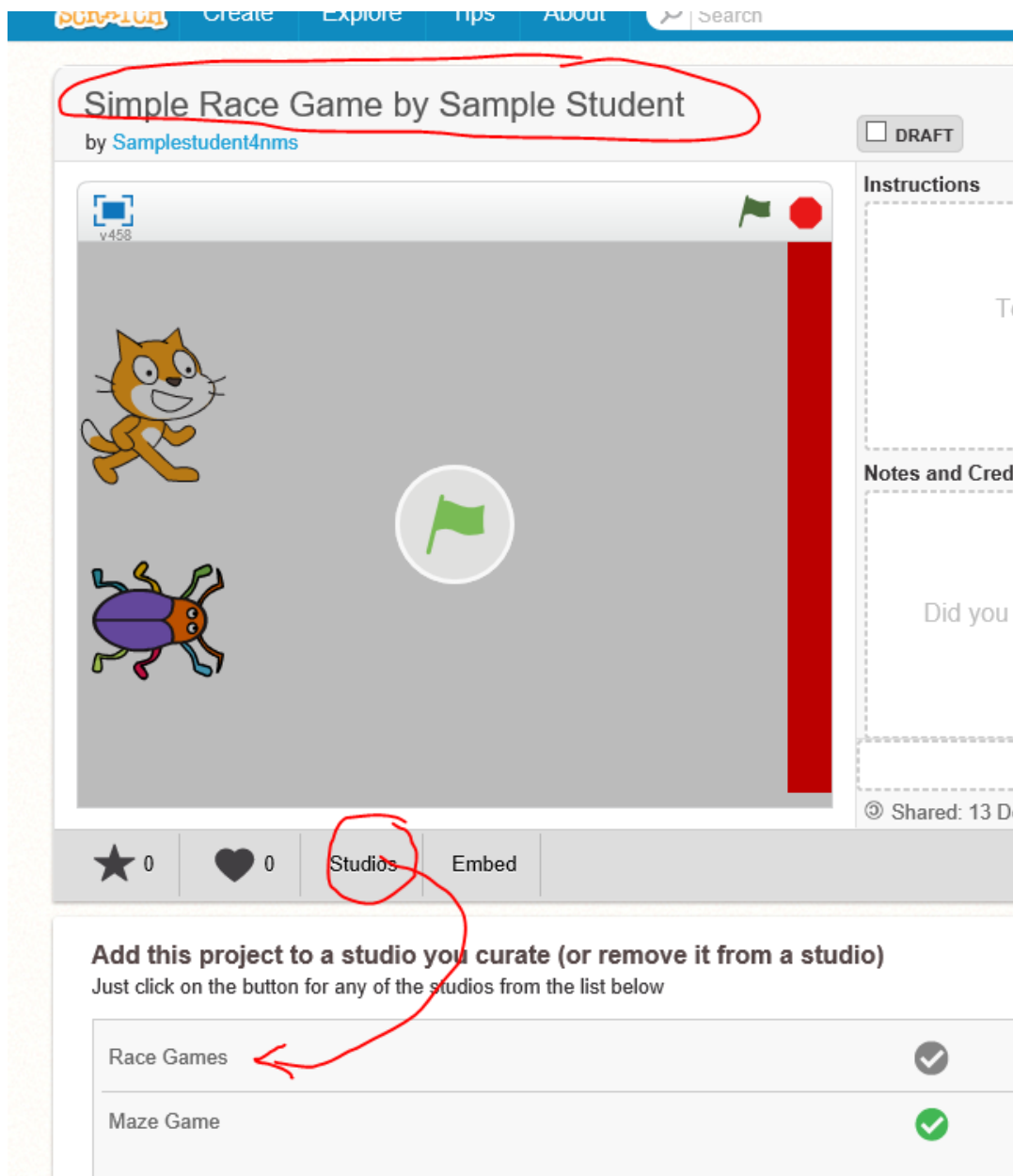
**EVENTS**--> "When Green Flag pressed"

**Motion**--> " Go to X: \_\_\_ Y: \_\_\_"

**STAGE**--> Backdrop



Give it a File Name  
(include your initials)  
Save Now Then Go to my Stuff)  
Add this project to a Studio





**Task A:**

- 1) Sign in
- 2) CREATE simple race game.
- 3) NAME it & SAVE it ("Race game by CD")
- 4) Place in 1) Race Game Studio

**Task B:**

- 1) Add an obstacle to race game
- 2) Add code to allow sprites to move around obstacle.
- 3) NAME it & SAVE it.
- 4) Place in 2) Obstacle Game Studio

**Task C:**

- 1) Create a maze game.
- 2) One sprite with at least 3 backdrops.
- 3) NAME it & SAVE it.
- 4) Place in 3) Maze Game Studio

# Task 1 - Race Game

The screenshot shows the Scratch development environment with the following components:

- Stage:** A cat sprite is positioned on the left side of the stage. A beetle sprite is also visible in the sprites area.
- Sprites:** The 'Sprites' panel shows two sprites: 'Sprite1' (the cat) and 'Beetle'.
- Script Area:** The script for the cat sprite is as follows:
  - When green flag clicked (Event)
  - Go to x: -192 y: 76 (Motion)
  - Point in direction 90 (Motion)
  - When right arrow key pressed (Event)
  - Point in direction 90 (Motion)
  - Move 10 steps (Motion)
  - Turn 15 degrees (Motion)
  - Turn 15 degrees (Motion)
  - Point in direction 90 (Motion)
  - Point towards mouse-pointer (Motion)
  - Go to x: -192 y: 76 (Motion)
  - Go to mouse-pointer (Motion)
  - Glide 1 secs to x: -192 y: 76 (Motion)
  - Change x by 10 (Operators)
  - Set x to 0 (Operators)
  - Change y by 10 (Operators)
- Code Area:** The code area shows the following blocks:
  - When green flag clicked (Event)
  - Go to x: -192 y: 76 (Motion)
  - Point in direction 90 (Motion)
  - When right arrow key pressed (Event)
  - Point in direction 90 (Motion)
  - Move 10 steps (Motion)
  - If touching color red? then (Sensing)
  - Say I win! for 2 secs (Sound)
  - If touching color black? then (Sensing)
  - Move -20 steps (Motion)

# Task 2 - OBSTACLE Game

The screenshot displays the Scratch IDE interface for a project titled "Race Game with Obstacle by SS" by "Samplestudent4nms". The stage area shows a black square obstacle and a vertical red line. The Sprites panel contains a Cat sprite (Sprite1) and a Beetle sprite. The Scripts panel is active, showing the following code blocks:

- when right arrow key pressed**
  - point in direction 90°
  - move 10 steps
  - if touching color red? then
    - say I win! for 2 secs
  - if touching color black? then
    - move -20 steps
- when up arrow key pressed**
  - point in direction 0°
  - move 10 steps
- when green flag clicked**
  - go to x: -192 y: 75
  - point in direction 90°

The Scripts panel also shows a list of motion blocks: move 10 steps, turn 15 degrees (left and right), point in direction 90°, point towards mouse-pointer, go to x: -192 y: 75, go to mouse-pointer, and glide 1 secs to x: -192 y: 75. The bottom of the Scripts panel shows blocks for changing x and y coordinates by 10 units and setting x to 0.

# Task 3 - Maze Game

The screenshot displays the Scratch IDE interface for a project titled "Maze Game 1 by SS" by "Samplestudent4nms". The main stage shows a maze with a black cat sprite at the entrance. The code editor is open to the Scripts tab, showing the following logic:

- Right Arrow Key Pressed:** A "when right arrow key pressed" event block triggers a sequence: "point in direction 90", "move 10 steps", and an "if touching color black?" condition. If true, it executes "move -20 steps". Another "if touching color red?" condition follows, which triggers "switch backdrop to next backdrop".
- Left Arrow Key Pressed:** A "when left arrow key pressed" event block triggers: "point in direction -90", "move 10 steps", and an "if touching color black?" condition. If true, it executes "move -20 steps". Another "if touching color red?" condition follows, which triggers "switch backdrop to next backdrop".

The Sprites panel shows "Sprite 1" (the black cat) on the stage. The coordinate system shows X: 240 and Y: -70.