Creating a basic Animation:

- 1. Open Scratch. Sign in. Go to Create.
- 2. Go to the upper bar. Rename your project from **Untitled** to **Animation** (or whatever you like)
- 3. Delete the Cat. (Click the **scissors** in the top bar and then click the Cat under **Sprites**.)
- 3. Create your First Twin Sprite
 - Click "Choose sprite from library" icon in the **Sprites** Bar after **New sprite**:.
 - Select Boy3 Walking.
 - Double click.
- 4, Create your Second Twin Sprite
 - Click "Choose sprite from library" icon in the **Sprites** Bar after **New sprite**:.
 - Select Boy3 Walking.
 - Double click.
- 5. Make the Second Twin turn:
 - Go to Costumes
 - Choose each costume and click on **Flip left-right** icon in the upper right corner
- 6. Make the first Boy move:

```
when clicked

go to x: -225 y: -95

show

forever

move 5 steps

wait 0.2 secs

next costume

if distance to Boy3 Walking2 = 0 then

say Hello! for 2 secs

if x position > 250 then

hide

stop this script *
```

7. Make the Second Twin move. **Be careful to change the x-coordinates** and change the "move steps" to -5!

```
when / clicked

go to x: 225 y: -95

show

forever

move -5 steps

wait 0.2 secs

next costume

if distance to Boy3 Walking = 0 then

say Hill for 2 secs

move -10 steps

if x position < -230 then

hide

stop this script =
```

Extras:

Add sounds or a longer conversation or other characters.

Creating a Basic *Hide and Seek* Game:

- 4. Open Scratch. Sign in. Go to Create.
- 5. Click on "Choose backdrop from library" icon below. Choose a backdrop. Double click.
- 6. Delete the Cat. (Click the **scissors** in the top bar and then click the Cat under **Sprites**.)
- 4. Create your Sprite
 - Click "Choose sprite from library" icon in the **Sprites** Bar after **New sprite**:.
 - Select an icon that you want.
 - Double click.
- 5. Click on **Scripts**
- 6. Click on Data. Click on Make a Variable. Write Variable name: Score. Click OK.
- 7. Create the Scripts for your Sprite:
 - Go to Events. Drag a "When Green Flag Clicked" into the scripts field
 - Go to **Data.** Drag "Set score to 0" and connect it to the Green Flag Script
 - Go to **Motion.** Drag "go to x: y: ".
 - Change the coordinates to 0: "go to x:0 y:0". and connect it to "Set score to 0"
 - Go to **Looks.** Drag "show". Connect. Drag "Say: ____ for __ secs". Change the message to "Catch me to score a point!". Connect.
 - Go to Control. Drag "forever". Connect.
 - Go to **Looks.** Drag "hide". Insert into "forever".
 - Go to **Control**. Drag "wait 1 secs". Connect to "hide".
 - Go to **Motion.** Drag "go to x: y: ".
 - Go to **Operators**. Drag "pick random __ to__". Change the numbers: "pick random -200 to 200". Insert it after x: . Drag "pick random __ to__". Change the numbers: "pick random -140 to 140". Insert it after y:

```
go to x: pick random -200 to 200 y: pick random -140 to 140
```

Connect to "wait 1 secs".

- Go to **Looks.** Drag "show". Connect.
- Go to **Control**. Drag "wait 1 secs". Change 1 to 0.7 or even less if you want your game to be harder.

```
when clicked
set Score v to 0
go to x: 0 y: 0
show
say Catch me and score a point! for 2 secs
forever
hide
wait 1 secs
go to x: pick random 200 to 200 y: pick random 140 to 140
show
wait 0.7 secs
```

8. How to keep score:

- Go to **Events.** Drag "when the sprite clicked"
- Go to Data. Drag "change score by 1" and connect to "when the sprite clicked"
- Go to **Sound.** Drag "play sound__" and connect.

If you want to change sound, click on **Sounds**. Under **New sound** click on **Choose sound from library**. Double-click on the sound you like. Go back (click on **Scripts**). In your "play sound___" tag change the sound.



Creating a Basic Maze Game:

- 7. Open Scratch. Sign in. Go to Create.
- 8. Delete the Cat. (Click the **scissors** in the top bar and then click on the Cat.)
- 9. Create your character Sprite:

Go to New Sprite. Ether go to Choose new sprite from the library or Paint new sprite.

10.Create your maze:

Click on **Stage**. Go to **Backdrops**. Draw your maze. <u>Use Rectangular Tool</u>. Click on **Scripts**.

5. Click on your Sprite.

Make it move and bounce from the walls by pressing arrow keys:

- Go to Events. Drag When Green Flag Clicked.
- Go to Control. Drag "forever" and connect it to When Green Flag Clicked.
 - Drag if . Drag when__key pressed onto the stage. Choose up arrow.
 - Go to Motion. Drag point in direction. Change to 0. Connect to when up arrow key pressed. Put move 2 steps in if.
 - Go to Control. Drag and connect another if.
 - Go to **Sensing**. Drag **touching color**. Click on the colour window and then touch your maze. The colour in **touching color** should change to the colour of your maze. Put **touching color** in the **if**.
 - Go to **Motion.** Put **move steps** after **if.** Change to **move -2 steps.** Then your sprite will bounce when touching the walls.

```
when clicked

forever

if key down arrow pressed? then

point in direction (180*)

move (2 steps)

if touching color (7) then

move (2 steps)
```

- 6.Make scripts to the rest of the arrow keys:
 - Right-Click on the script and **Duplicate.** Change to **up arrow**. Change direction to **0**.
 - Right-Click on the script and **Duplicate.** Change to **left arrow**. Change direction to **-90**.
 - Right-Click on the script and **Duplicate.** Change to **right arrow**. Change direction to **90**.
- 7. Let your sprite always start at the entrance of the maze:
 - Move your sprite to the entrance.
 - Go to Events. Drag When Green Flag Clicked.
 Go to Motion. Drag and connect go to x: y:

```
when clicked

forever

| | key down arrow | pressed? | then |
| point in direction (180) |
| move | steps | | touching color | 2 | then |
| move | steps | | touching color | 2 | then |
| move | steps | | touching color | 2 | then |
| move | steps | | touching color | 2 | then |
| point in direction (20) |
| move | steps | | touching color | 2 | then |
| move | steps | | touching color | 3 |
| touching color | 2 | then |
| move | steps | | touching color | 3 |
| touching color | 3 |
| touching color | 3 |
| touching color | 3 |
| touching color | 3 |
| touching color | 3 |
| touching color | 3 |
| touching color | 3 |
| touching color | 3 |
| touching color | 3 |
| touching color | 3 |
| touching color | 3 |
| touching color | 3 |
| touching color | 3 |
| touching color | 4 |
| touching color | 5 |
| touching color | 7 |
| touching color |
```

when clicked go to x: 19 y: -155

Creating a Basic *Race* Game:

- 11. Open Scratch. Sign in. Go to Create.
- 12. Make the Announcement Backdrop:
 - Click on Stage
 - Click "Paint new backdrop" icon under **New backdrop**:
 - Choose T (text tool) and type PLACE YOUR BETS! At the left edge of the backdrop
 - Click on **Scripts**
 - Go to Events. Drag a "When Green Flag Clicked" into the scripts field
 - Go to **Looks**. Drag and connect "change backdrop to__". Change it to "change backdrop to backdrop2".
 - Go to **Control**. Drag and connect "wait _ sec". Change it to "wait 4 sec".
 - Go to **Looks**. Drag and connect "change backdrop to__". Change it to "change backdrop to backdrop1".
 - Go to **Events**. Drag and connect "broadcast__". Open the menu inside "broadcast__". Click on "new message". Type "run". Click OK.

```
when clicked
switch backdrop to backdrop2
wait 4 secs
switch backdrop to backdrop1
broadcast run
```

13.Delete the Cat. (Click the **scissors** in the top bar and then click the Cat under **Sprites**.)

- 14.Create your Finish Line
 - Click "Paint new sprite" icon in the **Sprites** Bar after **New sprite**:
 - Draw a line from top to bottom
 - Click on sprite. Move the line to the right edge of the stage
 - You can rename your sprite. Click on *i*. Name your sprite "Finish".
- 3. Create your first racing Sprite
 - Click "Choose sprite from library" icon in the **Sprites** Bar after **New sprite**:.
 - Select an icon that you want.
 - Double click.
 - Move it to left edge of the stage (the Start of you race)
- 4. Make your sprite race:
 - Click on **Scripts**

- Go to **Events.** Drag a "When I receive__" into the scripts field. Choose "When I receive run"
- Go to **Motion.** Drag "glide _ sec to x: y: ". Change the coordinates to whatever coordinates are shown in the upper right corner. Change "glide _ sec" to "glide 2 sec". Connect.
- Go to **Control**. Drag "forever". Connect.
- Go to **Motion.** Put "move steps" inside the "forever"
- Go to **Operators.** Drag "pick random _ to _" inside the "move _ steps", Change "pick random 1 to 15"
- Go to **Control**. Drag "if _ then". Connect to "move".
- Go to **Sensing**. Drag "touching?". Change to "touching Finish?" or whatever the name of your Finish sprite. Insert into "if _ then".
- Go to **Control**. Drag "stop all". Insert in "if touching Finish? then".

```
glide 2 secs to x; 199 y; 109

forever

move pick random 1 to 15 steps

if touching Finish 2 then
```

5. Add more "racers"

- Click "Choose sprite from library" icon in the **Sprites** Bar after **New sprite**:.
- Select an icon that you want.
- Double click.
- Move it to left edge of the stage (the Start of you race)
- Click on your first "racer" sprite. Drag and drop the whole script onto your new "racer" sprite.
- Click on your new "racer" sprite. Change the coordinates in "go to x: y: ". to whatever coordinates are shown in the upper right corner. You have your second "racer"!
- Repeat these steps to create as many racers as you wish.