# CoderDojo Athenry "Above all, be cool"



#### **Every week:**

✓ Sign in at the door

#### If you are new:

- ✓ Fill in Registration Form
- ✓ Ask a Mentor how to get started

Make sure you are on the Athenry Parents/Kids Google Group: email coderdojoathenry@gmail.com

### CoderDojo Athenry

## SCRATCH DEGINNER'S



Code and notes by Michael Madden and Martha Fahy, 2013



Loops & Decisions Variables Communicating Sprites

#### How to Get Started

#### Plan the Design

- Think first!
- Start simple: add more later

#### Reminder from Week 1

#### Create First Character

- Design it: appearance & behaviours
- Write script (Code) to control its behaviours

#### Test It

- Any bugs? (Not working as expected)
- Debug and Improve

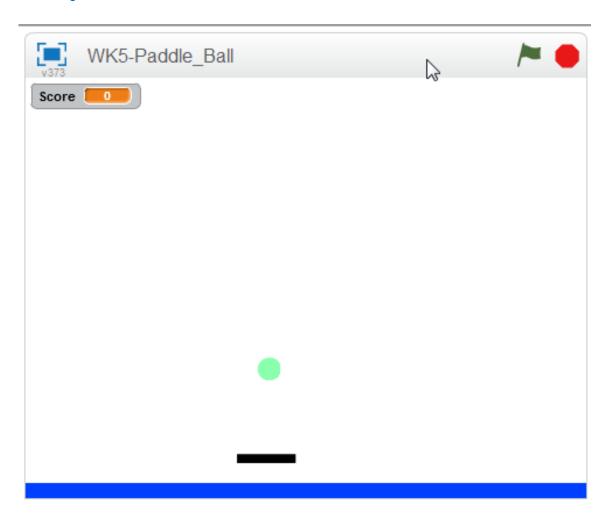
#### Extend It

More Characters, More Behaviours, More Testing!

#### Today's Ninja Challenge: Create a Game Like This



### My Game looks like this!



## You have to come up with your own idea.



OR

Príncess catching a Crown



OR

Knight catching a Dragon



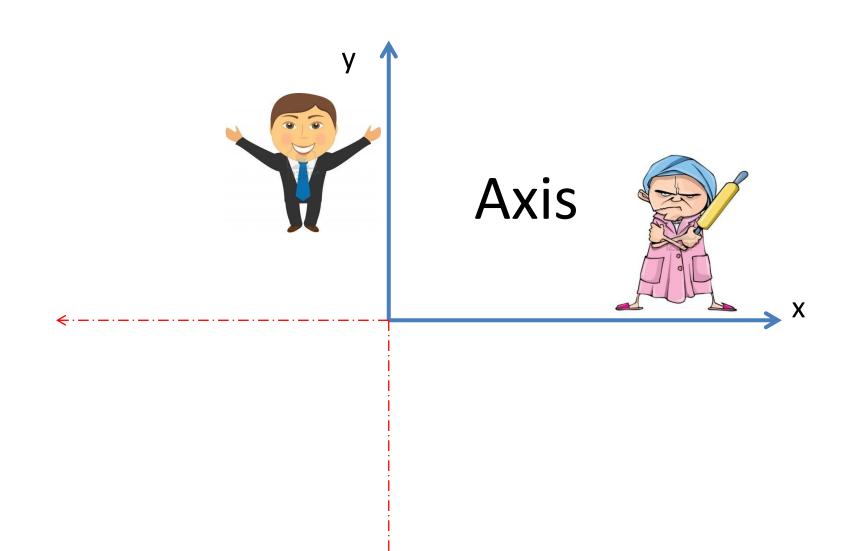
Wizards hat catching Stars

### Making your first Sprite Move

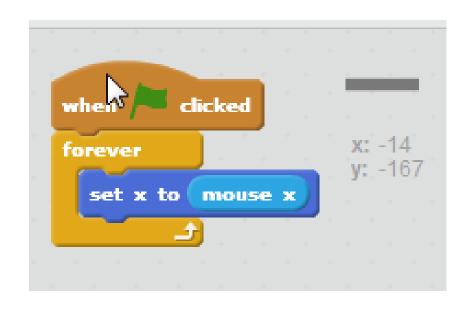
We need to move it with the mouse,

But only left and right

### Make it Move only on the X axis



### Make it Move only on the X axis



### Making our Second Sprite fall...

```
when clicked

go to x: 13 y: 157

forever

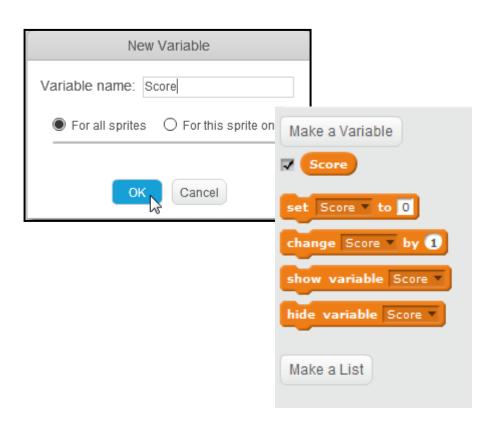
if on edge, bounce

move 4 steps
```

## We need to add some randomness...

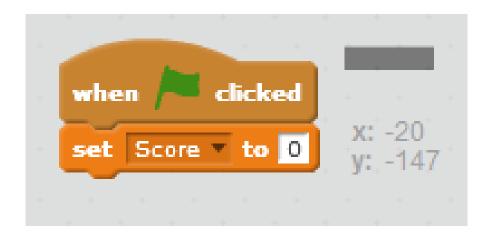
```
when Clicked
forever
      touching paddle ? ? then
    play sound water_drop
    point in direction 0
    move 5 steps
    turn ( pick random -20 to 20 degrees
```

#### Lets add a score!

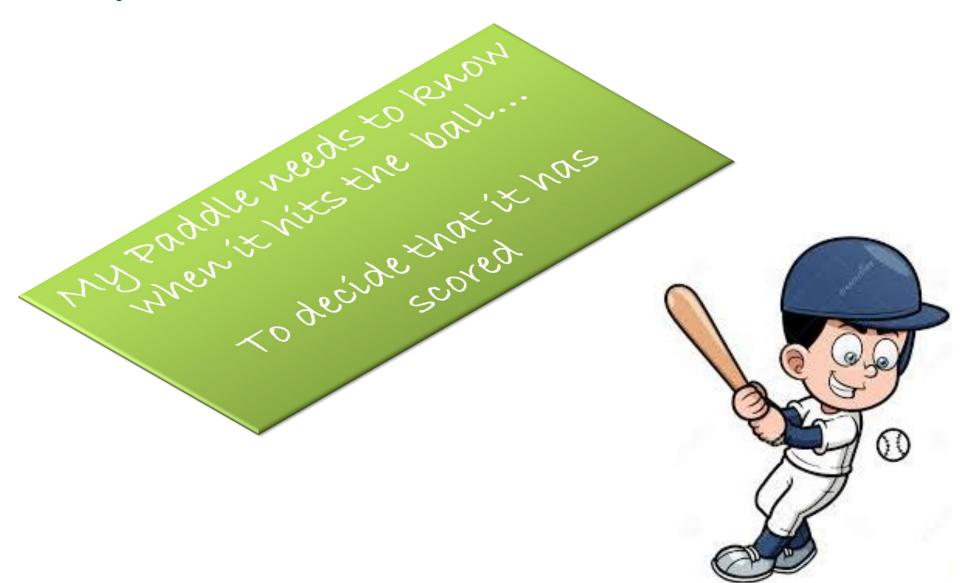


Lets make a variable

### Lets add a score!



### Sprites need to communicate



#### Broadcast

```
New Message

Message Name: Its a hit

OK Cancel

when I receive Its a hit 
broadcast Its a hit 
broadcast Its a hit 
and wait
```



### What happens if you miss!



### End of Game



#### If You Want to Do More ...

#### Add Levels:

When you have caught scored 10 points, make your sprite go faster

#### You will need:

Variable for Speed, initially 2

Variable for Score

Code: when **Score** = 10, set it back to 0 and increase Speed by 2

#### At the End ...

Upload your project to the Scratch Website

user: cdathenry password: athenry

Access it from home



Improve it



Show your friends!

