

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

Wifi password: **coderdojowireless**

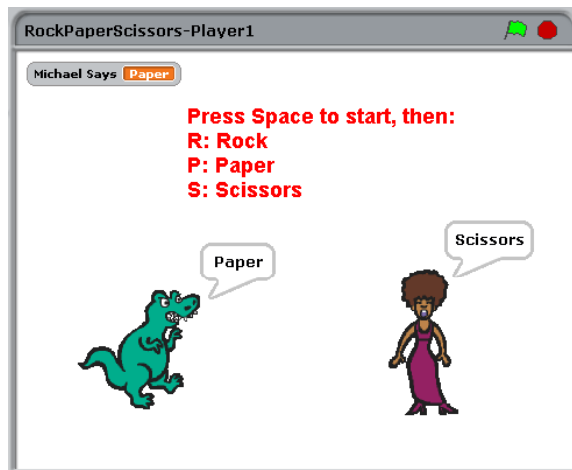
CoderDojo Athenry

Scratch Intermediate



Code and notes by Michael Madden, 2013

Today's Ninja Challenge: Create a Rock-Paper-Scissors Game for 1 or 2 Players!

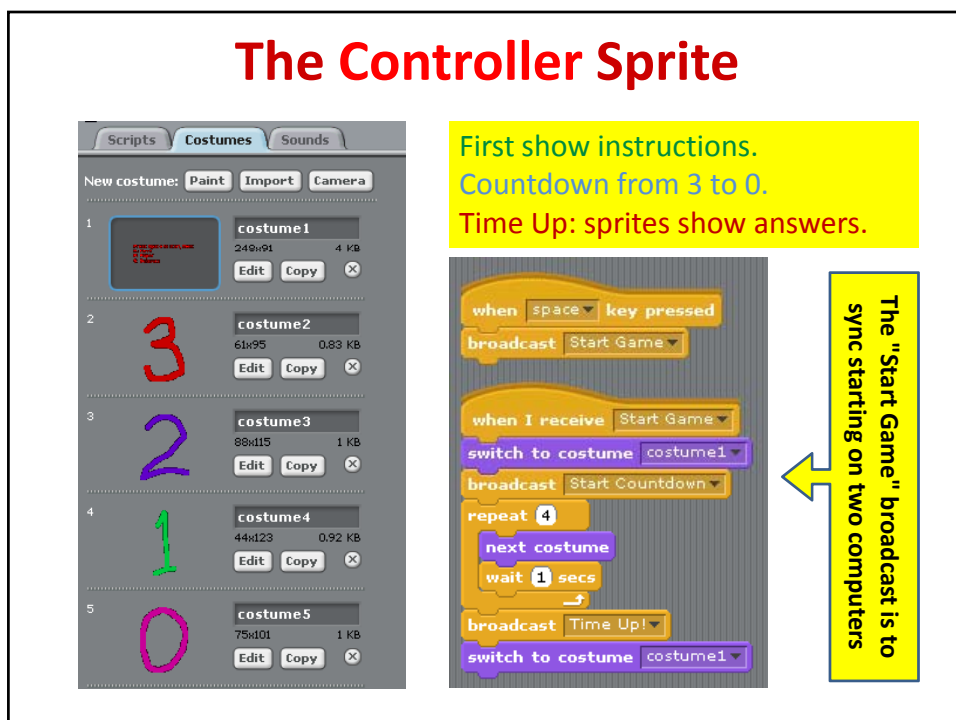
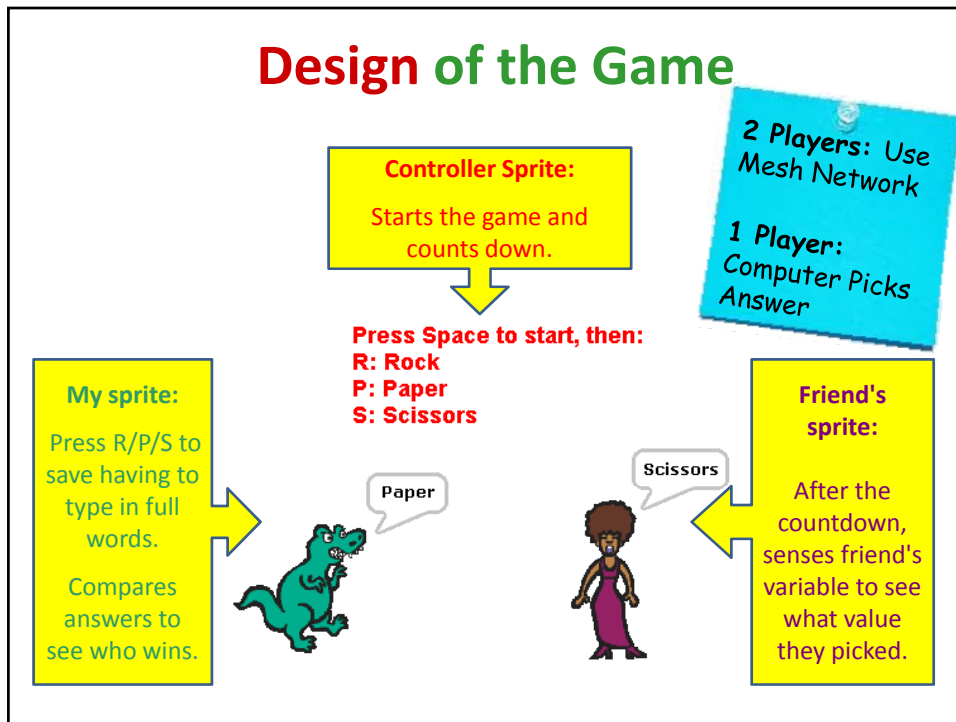


Today's Big Ideas

Design of 1 or
2 Player Game

Communication
with variables

Broadcasts



My Sprite



```

when r key pressed
set Michael Says to Rock

when p key pressed
set Michael Says to Paper

when s key pressed
set Michael Says to Scissors
    
```

Very important that both players use same spellings, including same capitals!

In a few minutes, we'll add more code to see who wins

Friend's Sprite: 2-Player Version

When time is up, sense what your friend has picked and display it

```

when I receive Start Countdown
say [ ]
  This is to get rid of what it was previously saying

when I receive Time Up!
set Friend Says to Patricia Says sensor value
say Friend Says
    
```

This is for 1 player in 2 Player version: need similar code for both



Friend's Sprite: 1-Player Version

The computer picks 1/2/3 at random for Rock/Paper/Scissors

```

when I receive Start Countdown
  say [This is to get rid of what it was previously saying]

when I receive Time Up!
  set Pick to pick random 1 to 3
  if Pick = 1
    set Friend Says to Rock
  if Pick = 2
    set Friend Says to Paper
  if Pick = 3
    set Friend Says to Scissors
  say Friend Says
    
```

Don't mix in code for 1-player and 2-player versions!



Who Wins?

Add this code to your own sprite. First test for a Draw, then start testing other combinations.

```

when I receive Time Up!
  say Michael Says for 2 secs
  if Michael Says = Friend Says
    say Draw!
  else
    if Michael Says = Rock and Friend Says = Paper
      say You win!
    if Michael Says = Rock and Friend Says = Scissors
      say I win!
    
```



Can you figure out the rest of this code?

Can you Think of More Features?

1. Play multiple times and keep score
2. Use graphics instead of saying the words
Rock / Paper / Scissors
3. Add sound effects
4. Support both 2-player
and 1-player mode, with
sprite to work as button to switch



Use your
imagination!

Next Time...

Design your own networked 2-player game!

Modify Pong?

Pick one of your old games and modify it?

Come up with a completely new one?

At the End ...

Upload your project to the Scratch Website
 user: **cdatheny** password: _____

Access it
 from home

Improve it

Show your
 friends!

