



CoderDojo Athenry



Code and notes by Martha Fahy, 2016

CoderDojo Athenry

"Above all, be cool"



Every week:

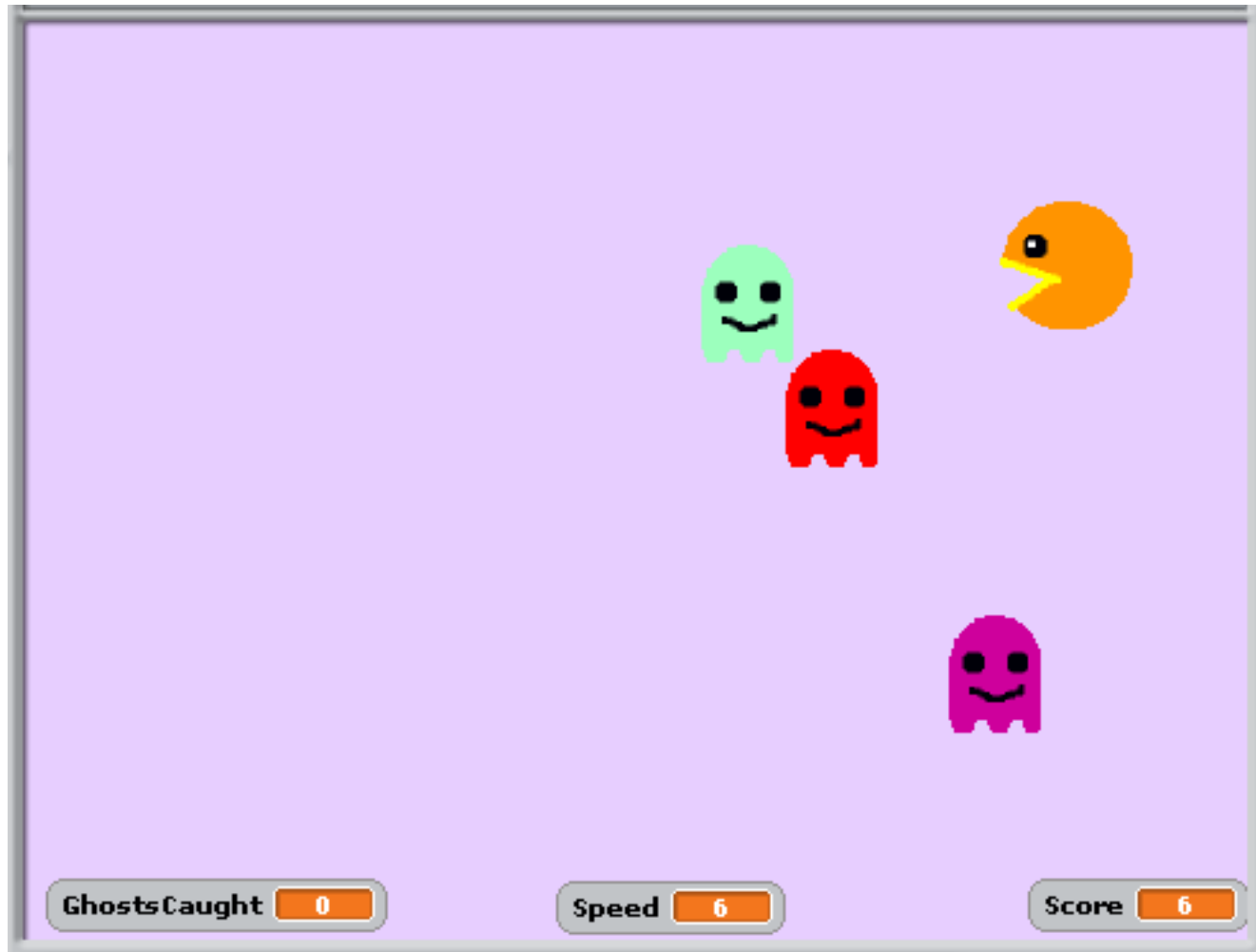
- ✓ Sign in at the door

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

Today's Ninja Challenge: Create a **GhostBuster** Game Like This



Today's **Big** Ideas

Designing
your game

Loops &
Decisions

Variables



How to Get Started

Reminder
from Week 1

Plan the Design

- Think first!
- Start simple: add more later

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!

Steps To Make This Game


Create your **Ghost Catcher**: appearance?
Code to control it with mouse



Change the **Stage**:
Plain coloured background?



Create first **Ghost**: appearance & code
Duplicate it when it is working

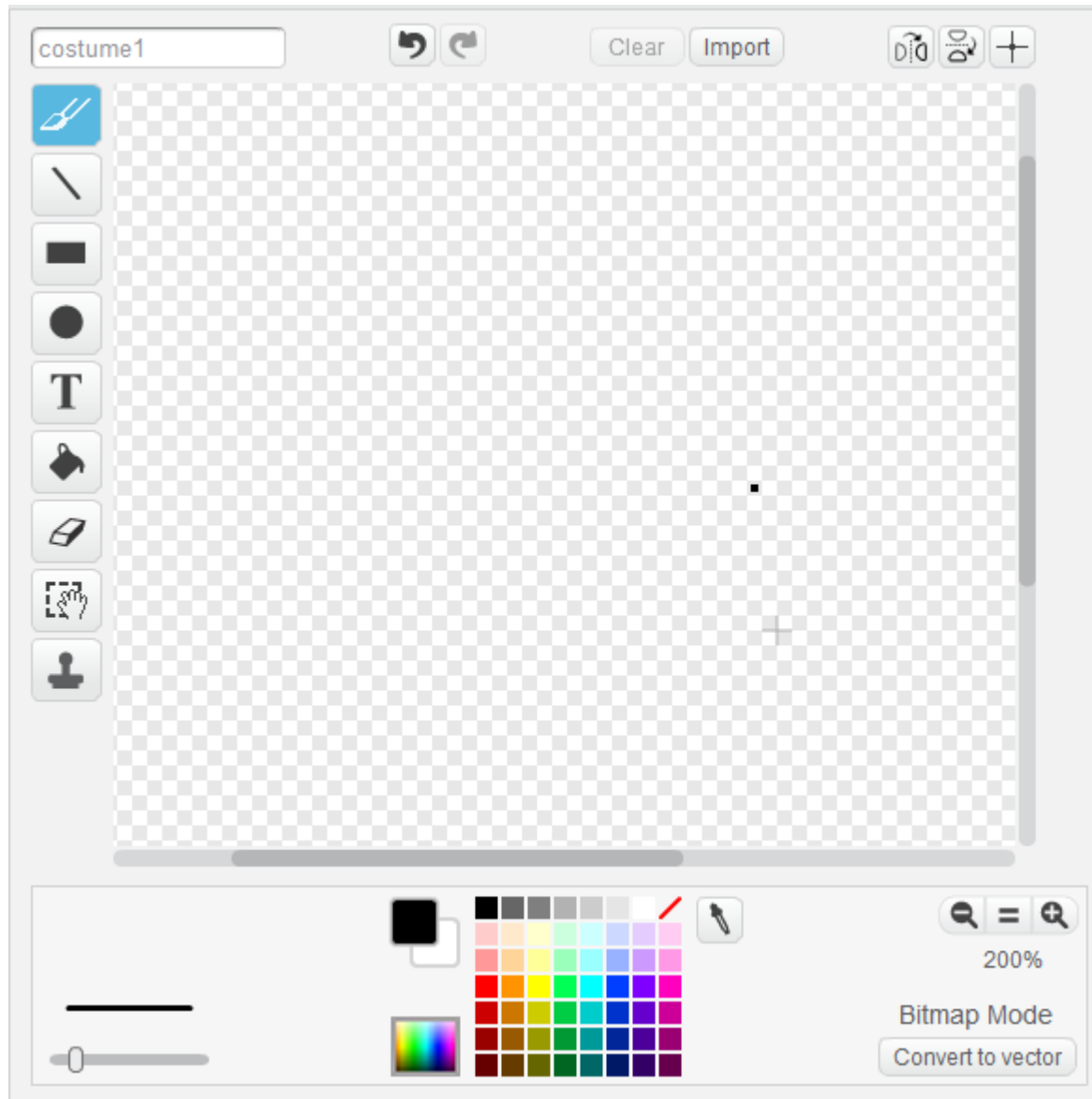


Make things happen when
a Ghost is **caught**

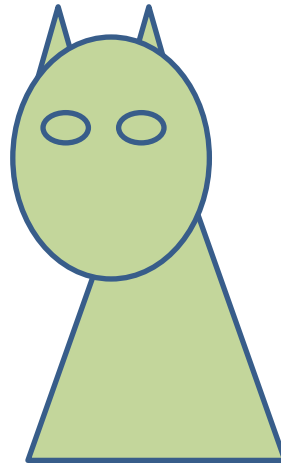
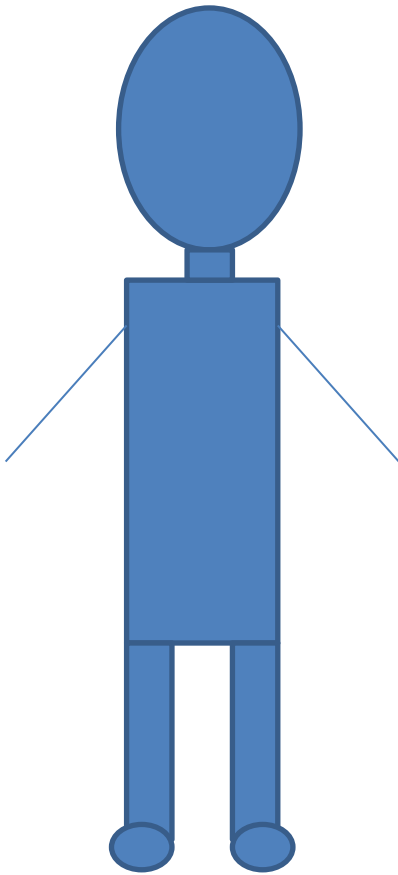


Add **variable** for **Score**
Optional: New **level** when all caught

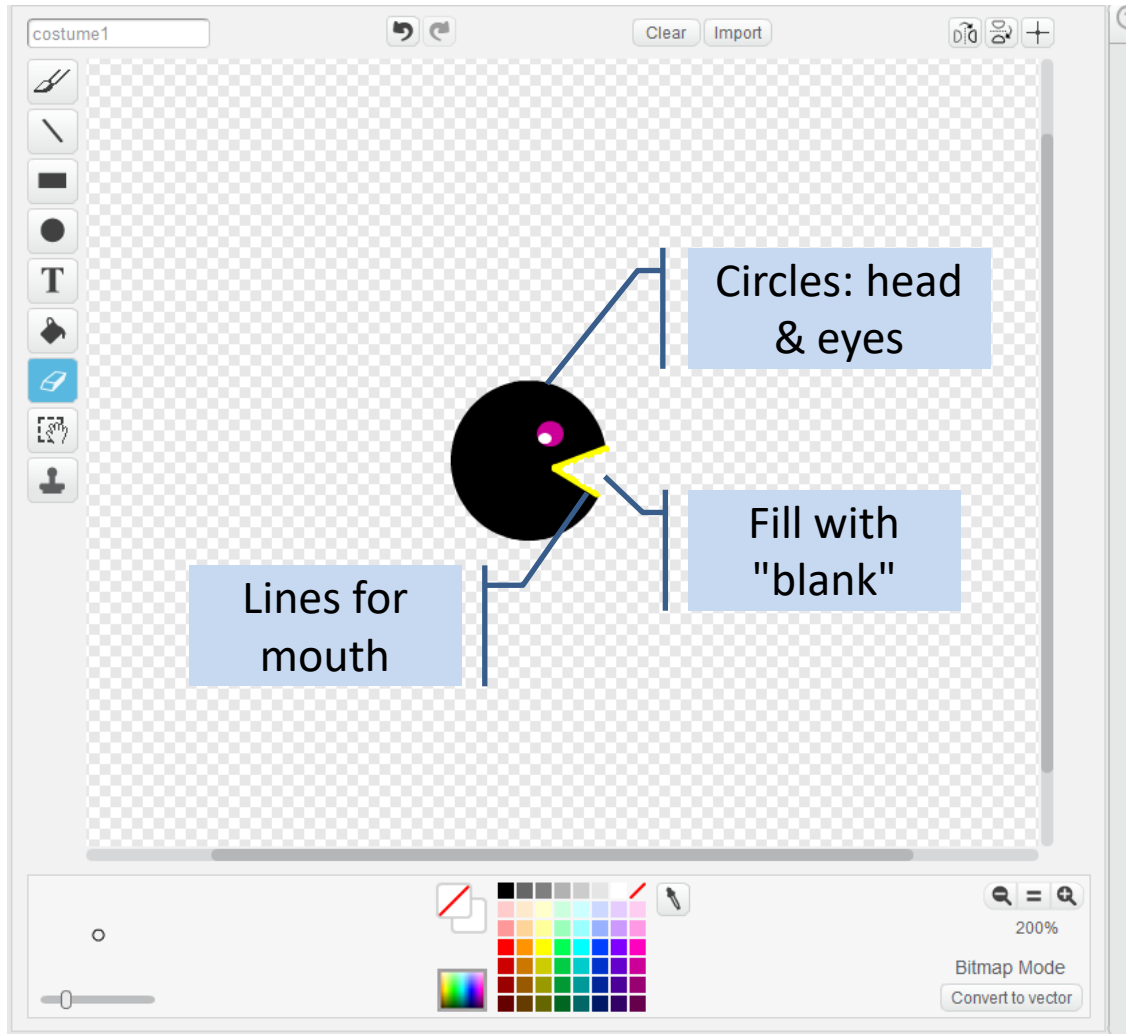
Paint Editor in Scratch



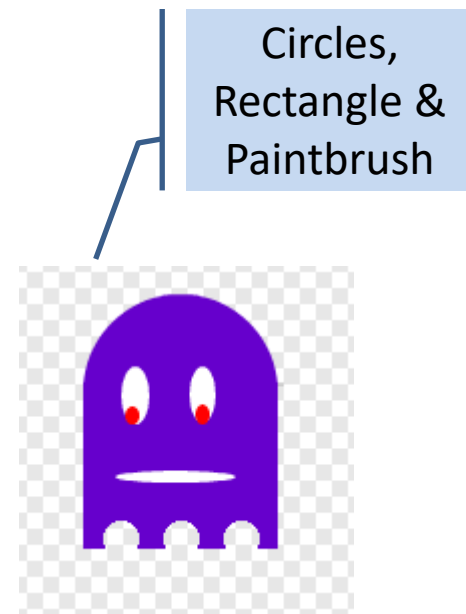
Think in Shapes



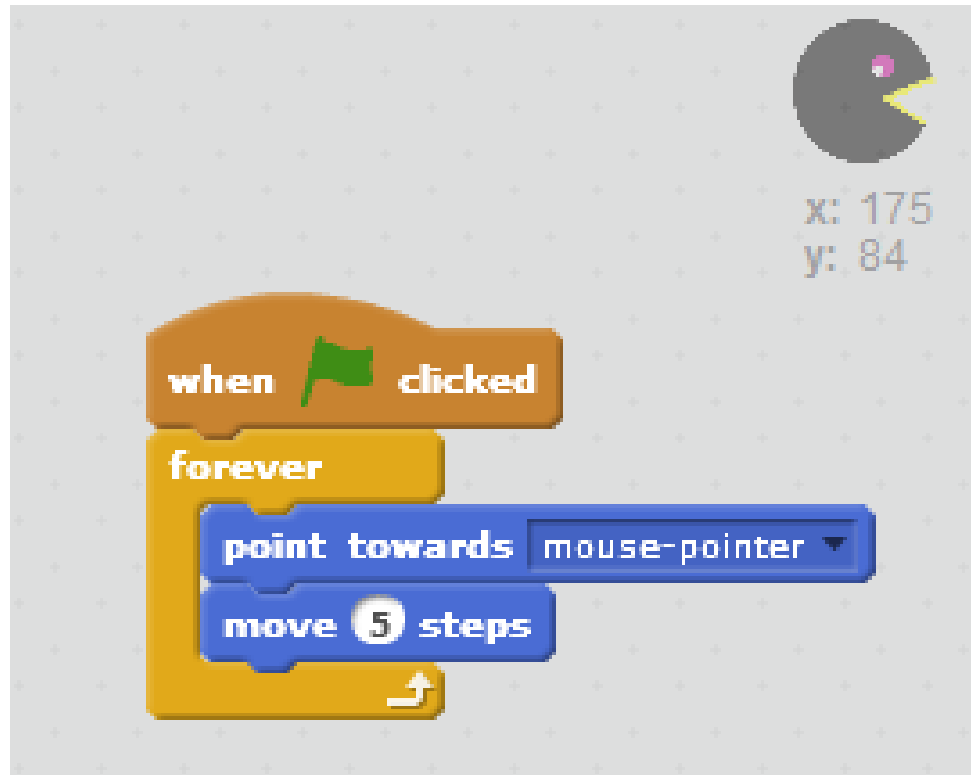
Design PacMan and a Ghost



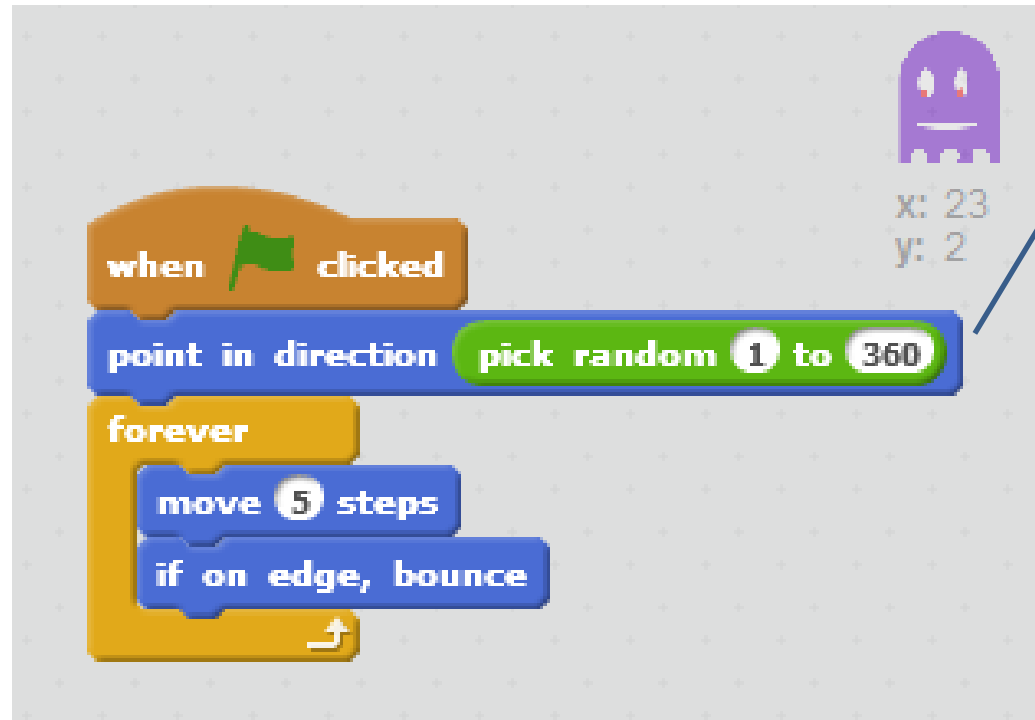
TIP: Use distinctive colour (e.g. yellow) at front/mouth: will use this when detecting if ghost is eaten



Make PacMan Follow the Mouse



Make Ghost Move Around



What is
significance
of 1-360?

TIP: Get one ghost working fully – you can duplicate it later.
Right-click on a sprite to duplicate it.

Loops and Decisions

Key programming concepts

Loop:

Repeat code multiple times

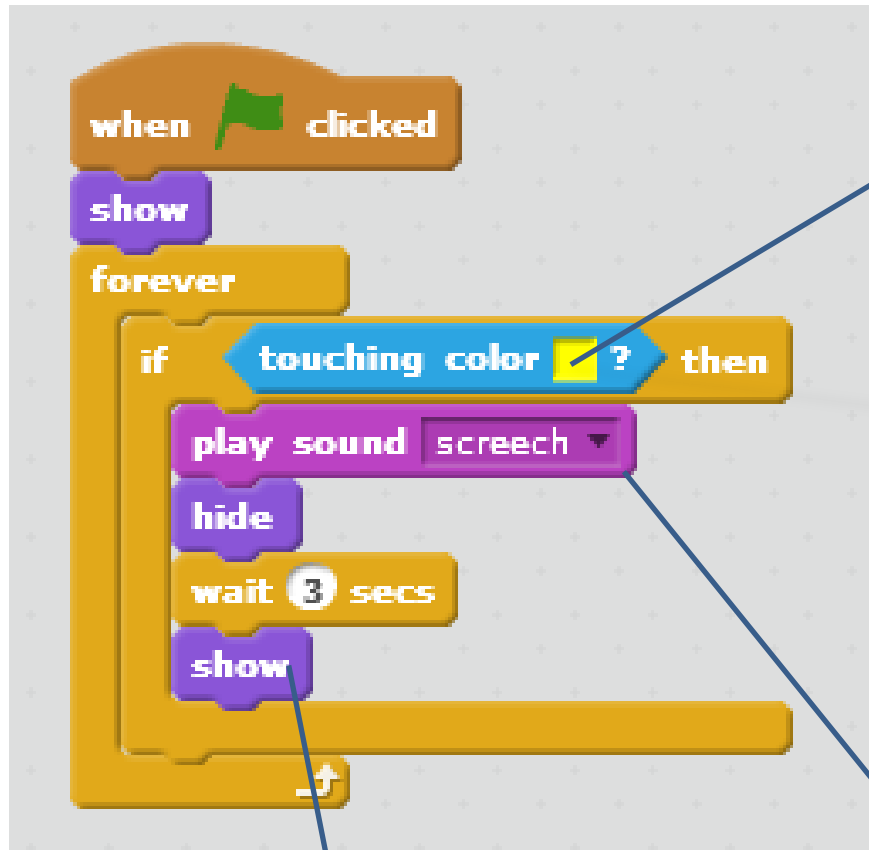


Decision:

Decide whether or not to do something



When PacMan Gets Ghost ...



How we detect
PacMan: colour
of its mouth

Show at start.
Hide when eaten.
Wait & show again.

Switch to Sounds tab
& RECORD sound

Duplicate Ghost, Make Each One Look Different

