

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 Intermediate & Advanced



Code and notes by Michael Madden, 2013

New Plasticine!



Huge thanks to
www.SpecialistCrafts.ie

Today's Ninja Challenge: Start Working to Earn a Certificate!



Yellow Cert if you hold a
Yellow Belt

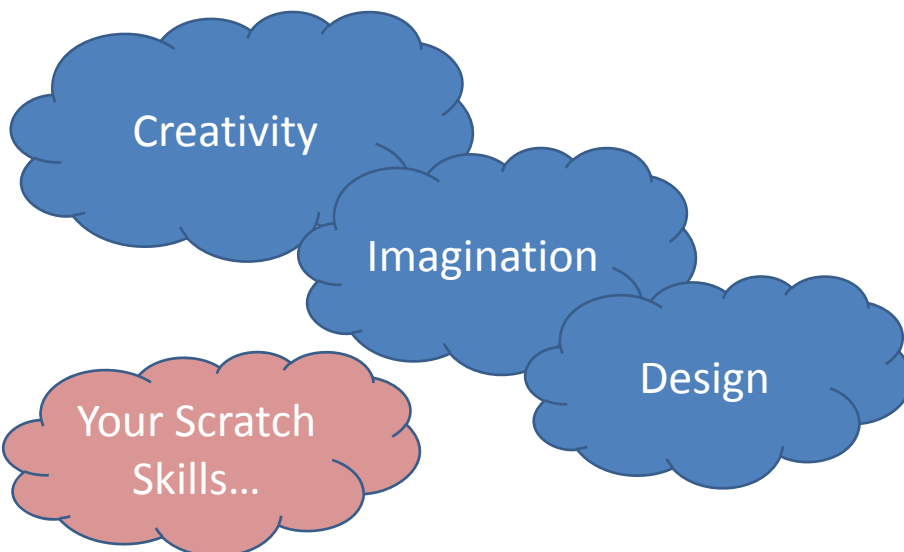
Blue Cert if you hold a
Blue Belt



Only If You Don't Already Have a First Belt, Earn Your First One



This Challenge's Big Ideas



Plan for the Next Few Weeks: Design & Code Your Own Game!



Start Planning It Now ...

Form a team with friends
or do a **solo** project

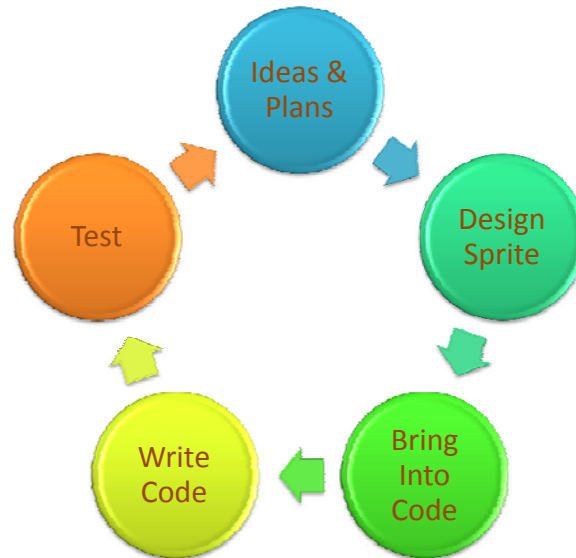
Think of some **ideas**; pick one:
Phone & web games that you like?

Plan on paper: What are main sprites in
your game, how will they look & behave?

Start simple; get something working and
add more afterwards

Keep your notes with you for next week,
we will **help you** to make progress

Development Cycle



How to Get Started

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!

*Reminder:
repeated from
Week 1*

How to Make Progress

Our Creative Coding Rule:
There's More Than One Way to Do It!

Reminder:
repeated from
Week 1

Try things out and **iterate**
Save copies: go back if it doesn't work

Talk to others, **share** ideas, learn from
their ideas, **improve** on their ideas!

Examine other people's code on the
Scratch website & upload your code

Two Belts: White or Yellow

White: Commitment & Basic Skill



Attend at least 5 sessions
+ Know how to get started with Scratch

**Only awarding belts to people who don't
have their first one already**

Two to Earn: White or Yellow

Yellow Scratch Belt: Competent Scratch Coder



1. Qualify for a White Belt
2. Write and explain a Scratch Program with:
 - Forever/Repeat
 - If blocks
 - Variables
 - Animation/Sound
 - Sprite controlled by mouse or keyboard**Must be all your own work!**

Procedure for Yellow Belt

A couple of mentors will have a chat with you

Ask you to show us your code (new or old)

See if you know **most** of these Scratch ideas:

Loop Blocks (Forever/Repeat)

If Blocks

Variables

Animation, Sound & Changing Backgrounds

Make a Sprite Move

Make a Sprite Say Something

Use Broadcasts

Yellow Scratch Belt: Program Ideas

Squash Game

- Control a bat to hit a ball
- Ball bounces off wall on the other side
- Game over when you miss 5 times

ABC Game

- Sprites with A/B/C fall from random start point
- Press A/B/C key to stop them
- Keep score of how many you stop

To Earn a Certificate, demo a project at appropriate level



Yellow Cert if you hold a Yellow Belt



Blue Cert if you hold a Blue Belt

**CoderDojo Competitions:
Enter if you wish**

Coollest Projects competition (DCU):

<http://coolestprojects.org/>

Cisco Transatlantic Challenge:

<http://coderdojo.com/2013/04/11/transatlantic-coderdojo-challenge/>

Look into these with your parents ...

**Demo Your Creation
To Us All!**

At the End ...

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

Access it
 from home

Improve it

Show your
 friends!

