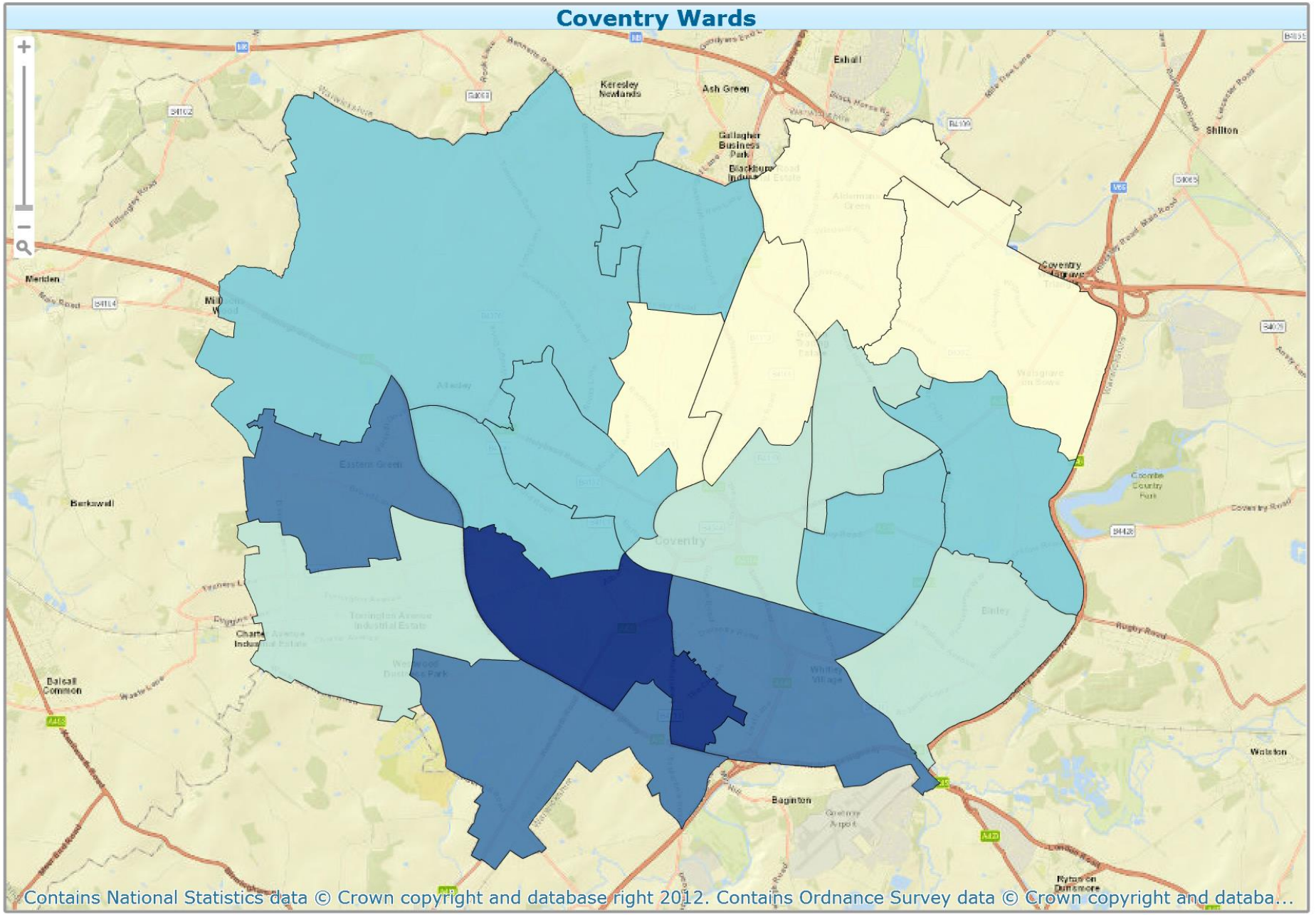
Computers Creativity and Children

Margaret Low

Coventry 2013 – 2014

% of KS4 pupils gaining 5+ GCSEs graded A*-C



Source: http://www.coventry.gov.uk/info/195/facts_about_coventry/2439/skills_and_education

Coventry Branch

Challenge IT News

November 2015

Email: challengeIT.cov@bcs.org.uk

Special Points of Interest:

- Support for British Science Week 2016
- Competition for local Schools and Youth Groups.
- Organised by BCS
- Prizes from BCS, IET, OCR, Coventry University, University of Warwick.

Challenge IT 2016 Competition

british science week

WMG staff in ‘judging’ hats

BCS Coventry + Technology Volunteers in “judging hats”

Challenge IT: Local network and wider contacts

Professional Bodies

- BCS (Coventry)
- IET (West Midlands)

Local Education Authorities

- Coventry ICT Advisors
- Warwickshire ICT Development Service

Local Secondary Schools

- Coventry
- Warwickshire
- Solihull
- South Leicestershire

Local Universities

- Coventry University
- University of Warwick

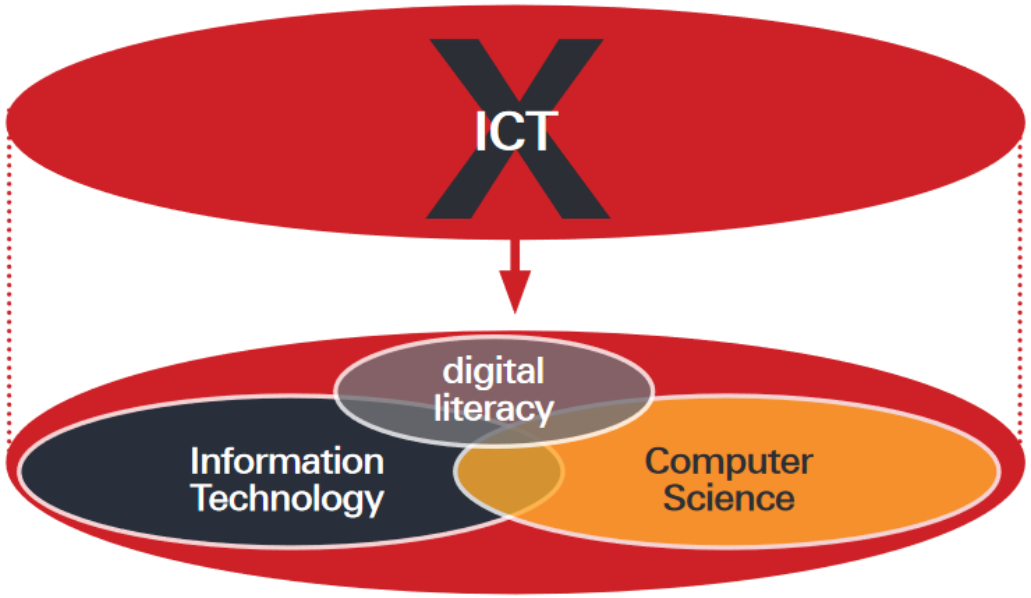
Others

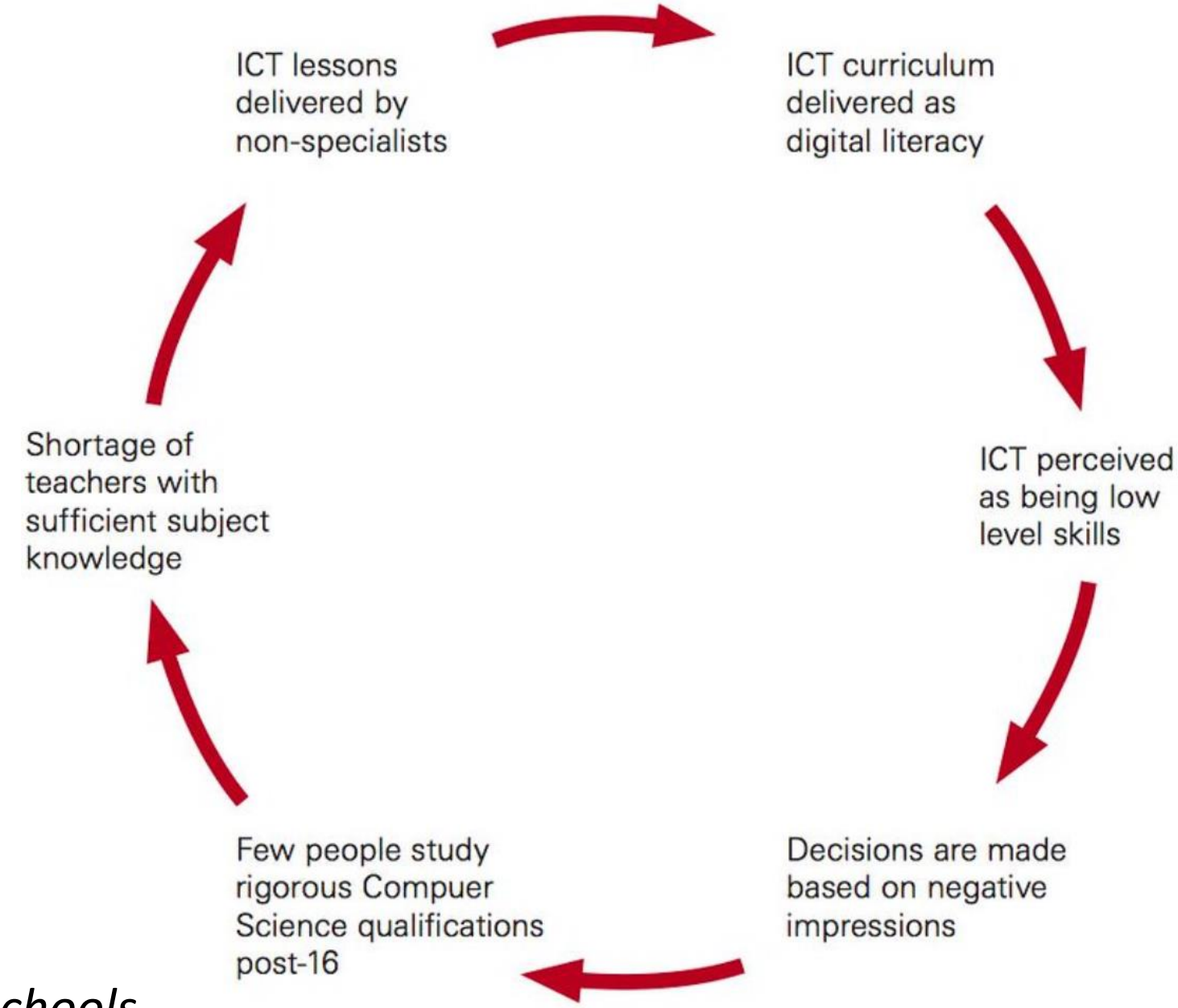
- Company + Industry sponsors
- Local STEM Ambassador co-ordinator
- Computing At School (CAS)

COMPUTING AT SCHOOL

EDUCATE · ENGAGE · ENCOURAGE

In collaboration with BCS, The Chartered Institute for IT





Restart or Shutdown

The way forward for computing in UK Schools.

Royal Society Report 2012

What is wrong with this space?

Why aren’t computers more like these tools?

Code Costumes Sounds

Motion
Looks
Sound
Events
Control
Sensing
Operators
Variables
My Blocks

Looks

say Hello! for 2 seconds
say Hello!
think Hmm... for 2 seconds
think Hmm...
switch costume to costume1
next costume
switch backdrop to backdrop1
next backdrop
change size by 10
set size to 100 %
change color effect by 25
set color effect to 0
clear graphic effects

when clicked
move 10 steps
say Hello! for 2 seconds
if touching Dog ? then
play sound Meow until done

Backpack

Sprite Cat x -85 y -62
Show Size 100 Direction 90

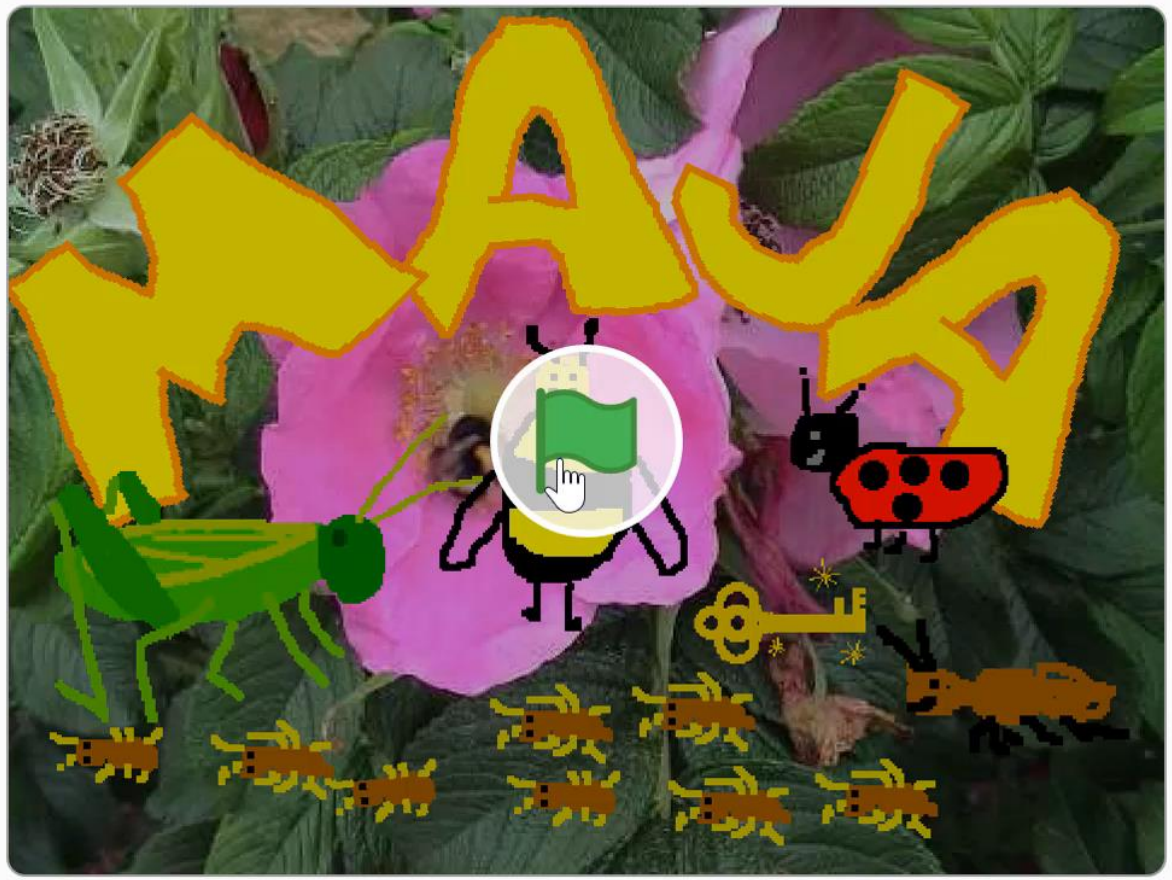
Cat
Dog

Stage
Backdrops 1

bienemaja

by vally

Remix | See inside



Notes and Credits

I made this game with help of my father (programming tips) and my brother and sister (voices and sound). It was a lot of work and we think it's also a lot of fun. We used our german voices, but we made the bubblehelp in english.

We hope you like it!
If you want, you can create new adventues with Maya!

P.S. the Offline-Verision of "Maya" in the SCRATCH-enviroment runs perfect, whereas the online-Version shows some problems with "hidden-sprites" that will vanish with the debugged version of the SCRATCH-Online-Environment, that will be released by the SCRATCH-Team soon.

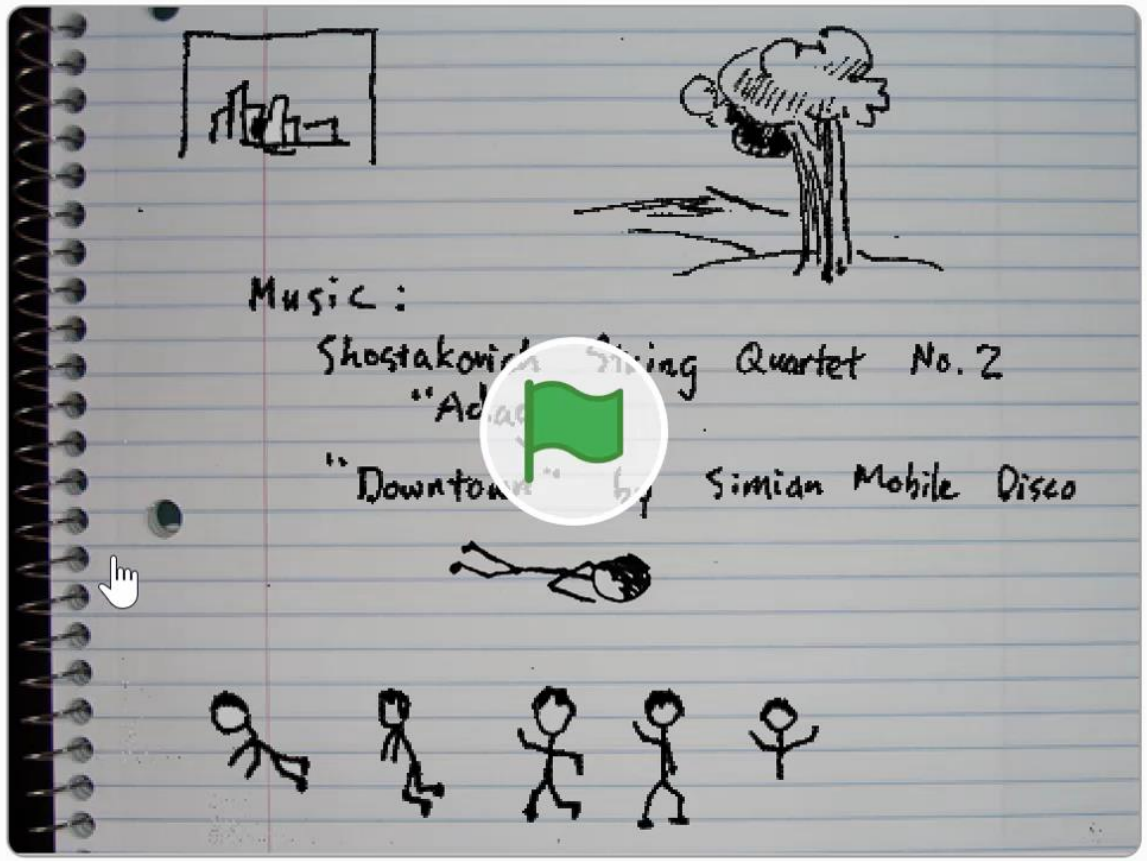
71 76 131 2133 © Apr 09, 2007

Add to Studio | Copy Link | Report

Day Dream

by cremeglace

See inside



Notes and Credits

A short animation.
http://jueseph.com/blog/2007/09/28/what-i-learned-in-computer-science-50/
Click on the tree and mountains for some interesting effects.

For those of you who are curious, I actually drew in a sketchbook, took digital pictures, and then ran them through photoshop to get the right contrast to extract pure black/white figures. Really clumsy, but the project was due the next day and I didn't have a scanner on hand. The whole process took 6 hours, most of it spent drawing and processing pictures and extracting music clips, the rest spent adjusting wait times. The actually coding was simple because the whole thing is pretty linear and non-

415 385 593 12662

© Sep 28, 2007

Copy Link

Scratch: Programming for All

BY MITCHEL RESNICK, JOHN MALONEY, ANDRÉS MONROY-HERNÁNDEZ, NATALIE RUSK, EVELYN EASTMOND, KAREN BRENNAN, AMON MILLNER, ERIC ROSENBAUM, JAY SILVER, BRIAN SILVERMAN, AND YASMIN KAFAI

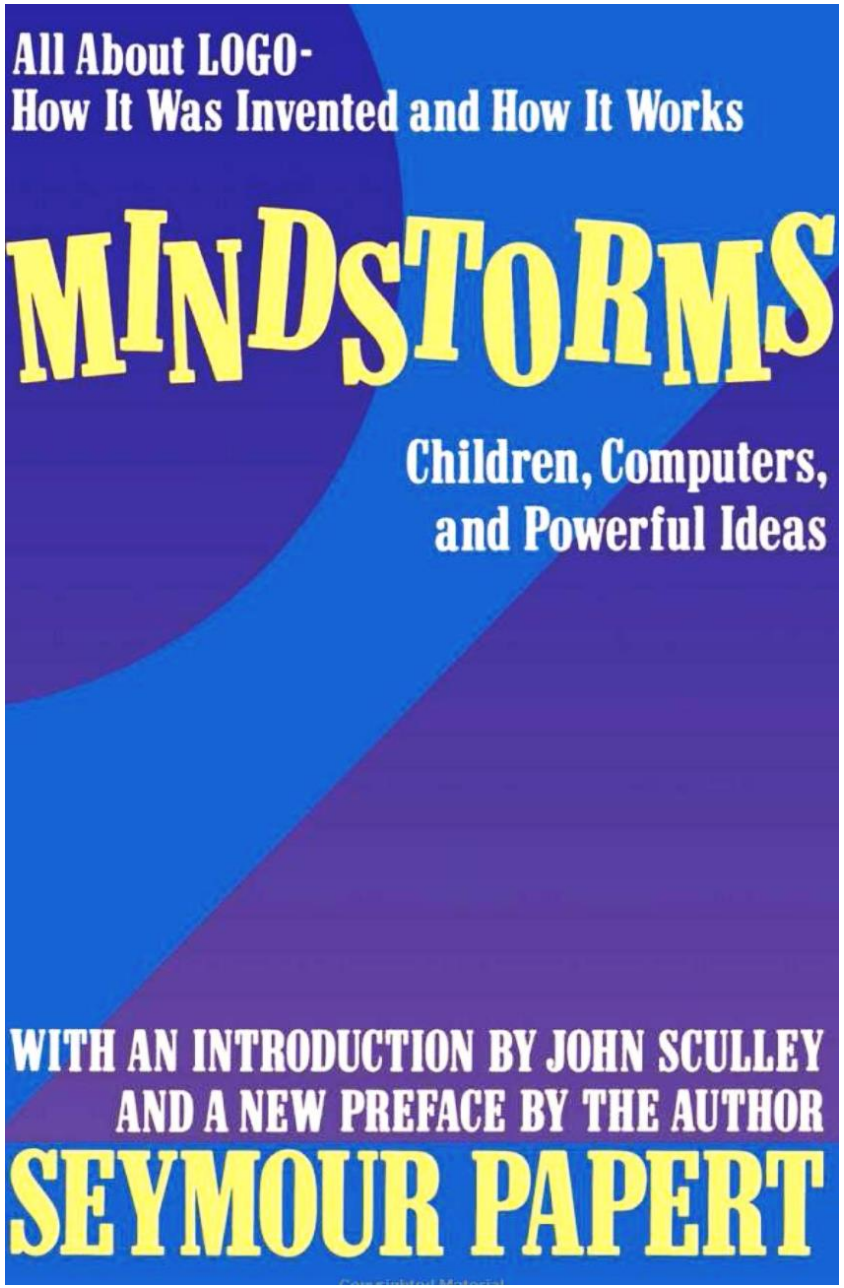
- **low floor** easy to get started
- **high ceiling** opportunities to create complex projects
- **wide walls** room for many different interests and learning styles

Communications of the ACM, November 2009

Logo – originally developed by Papert, Solomon and Feurzeig, 1967

A square can be produced by the commands

```
FORWARD 100
RIGHT 90
FORWARD 100
RIGHT 90
FORWARD 100
RIGHT 90
FORWARD 100
RIGHT 90
```



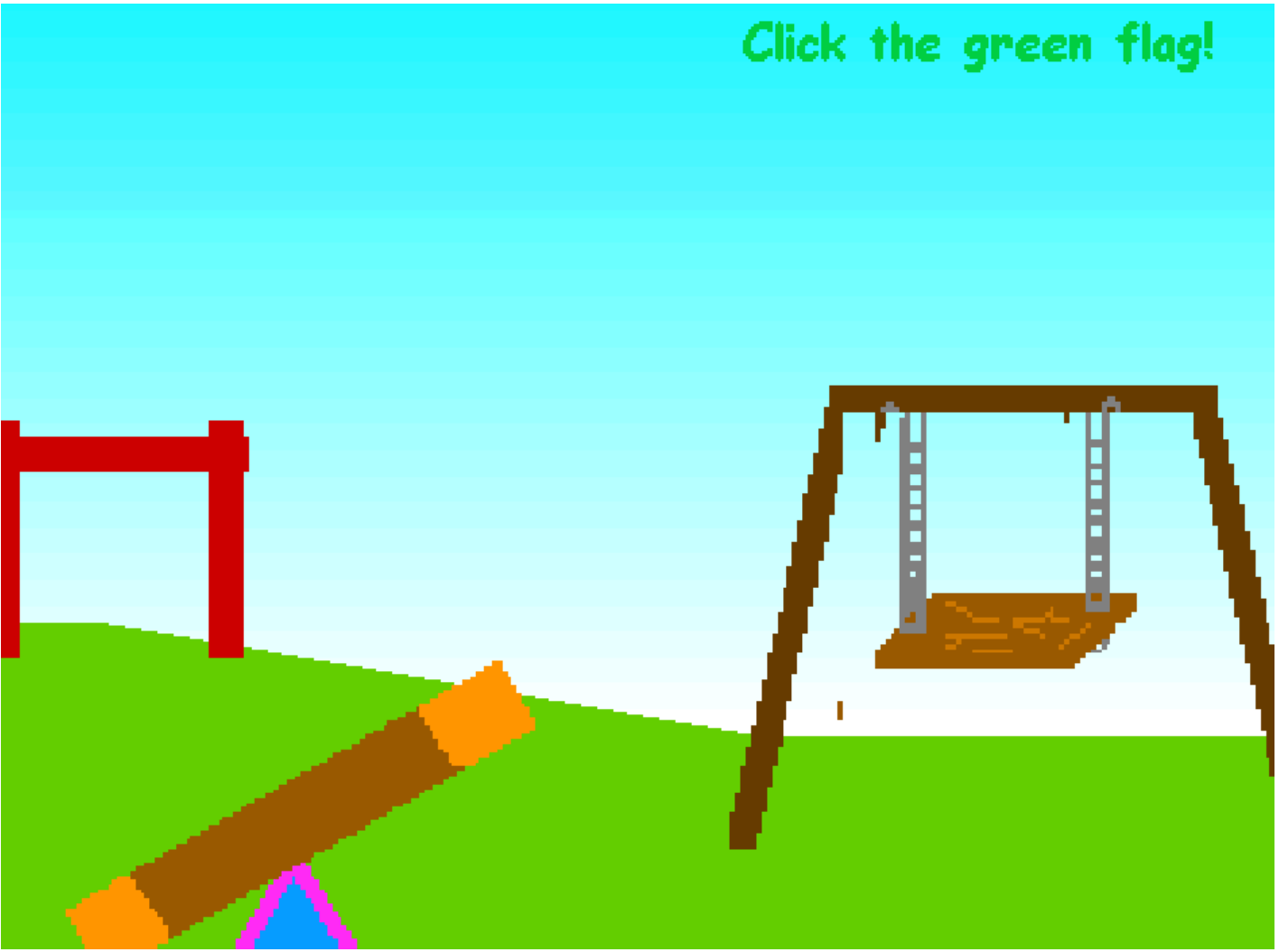
Create stories, games, and animations
Share with others around the world

A creative learning community with **5,777,936** projects shared

ABOUT SCRATCH | FOR EDUCATORS | FOR PARENTS

Featured Projects

Collaborations and companies



Thanks to leeor99 for the original project ganshaaaaa.

GRAY BEAR PRODUCTIONS

Caramell danse [1] [1] [1] [1] [1] [1] [1] [1] [1] [1]

by complex

See inside

Thanks to Maki-Tak for the original project Caramell danse [1] [1] [1] [1] [1] [1] [1] [1] [1] [1].

Notes and Credits

Ok, If you like, you may remix this project and add in your character, if you have one, doing CARAMELLDANSEN!! :D RULES: Please make it las for atleast less than 8 secondes so that others who want to submit can have a chance at it! thankuu 4 participationg! Scratch on!! :3
~Kaotheroogoncreator~
~igglepie~
~Yorie~
~imacat~
~J0j2~
~Dotsandstripes~
~Hidden-Heart~
~whitewolf292~

1 1 1 56

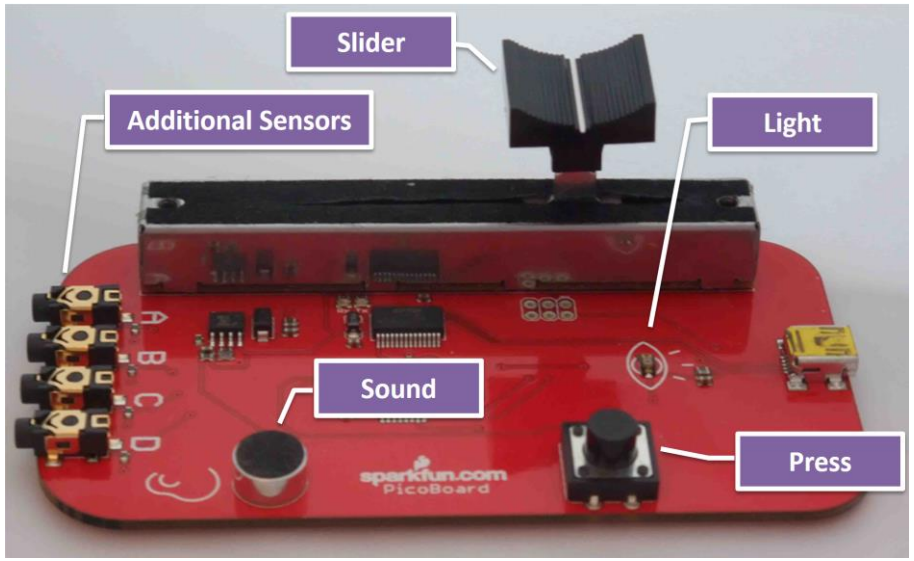
Oct 09, 2008

Copy Link

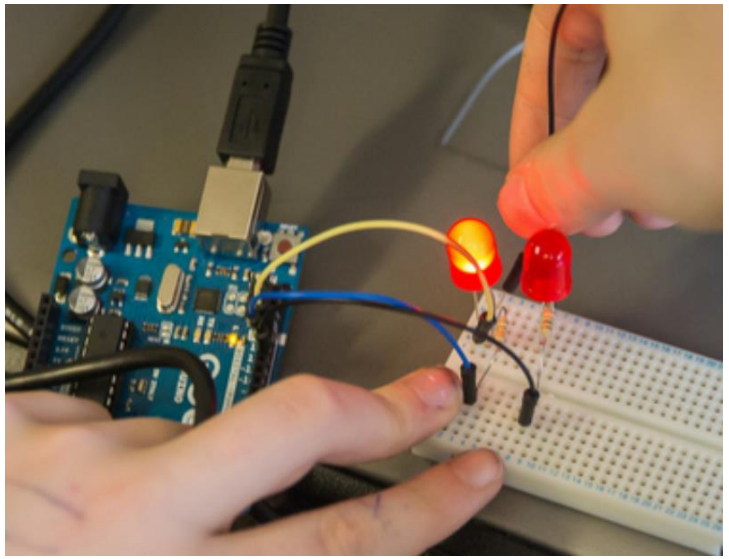
Technology Volunteers are a group of students and staff at the University of Warwick. We want to encourage children to become creators, rather than consumers of technology. Technology Volunteers offer support to local schools by assisting with technology-based projects and activities during lessons, or at after school clubs.

Programming by Stealth

Sensing Our World



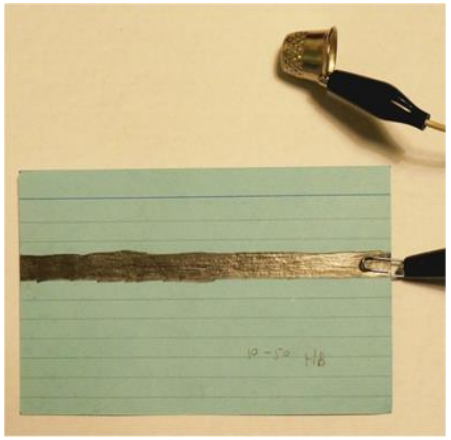
Introduction to Arduino



Sensing Our World

Tilt Sensor

Slide controller

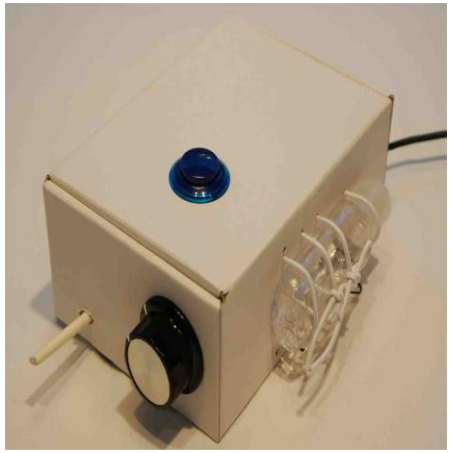


Bottle Top Drums

Buttons

Tiltometer

Box It 2.0

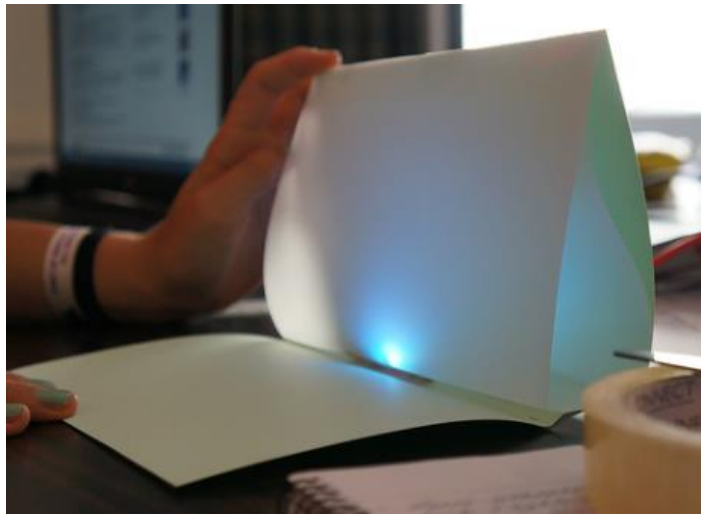


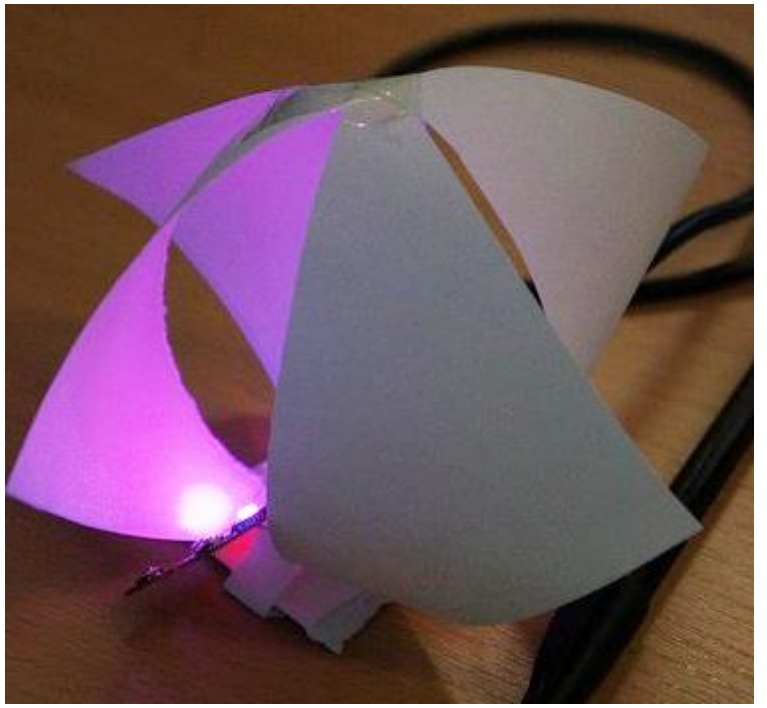
Dance Mat

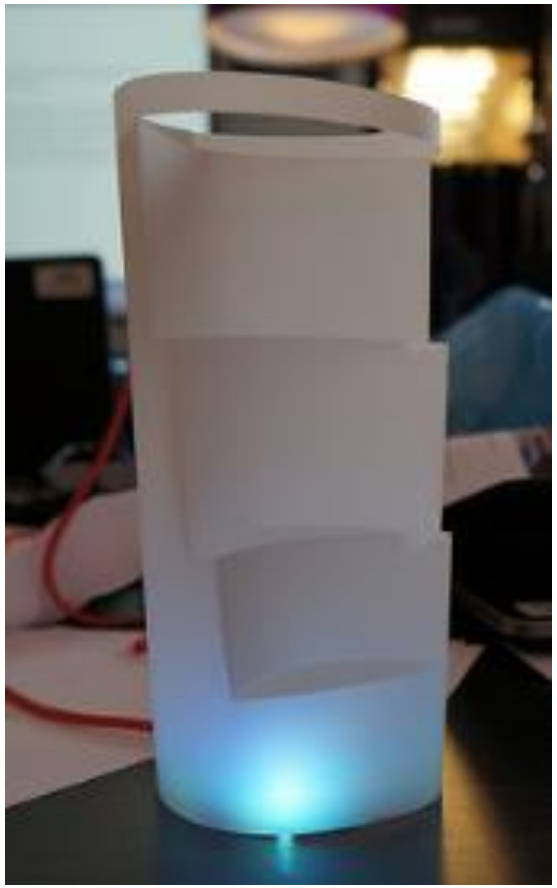
Button Box

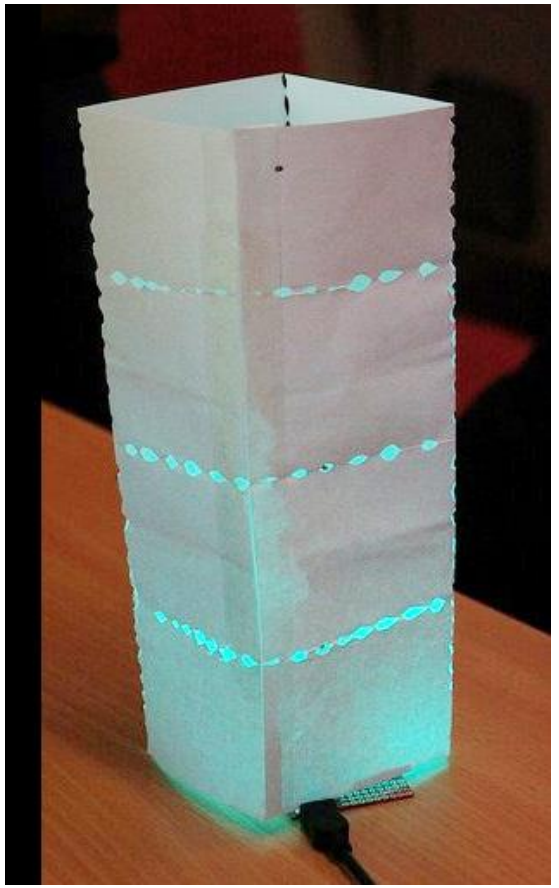
Illuminating Engineering

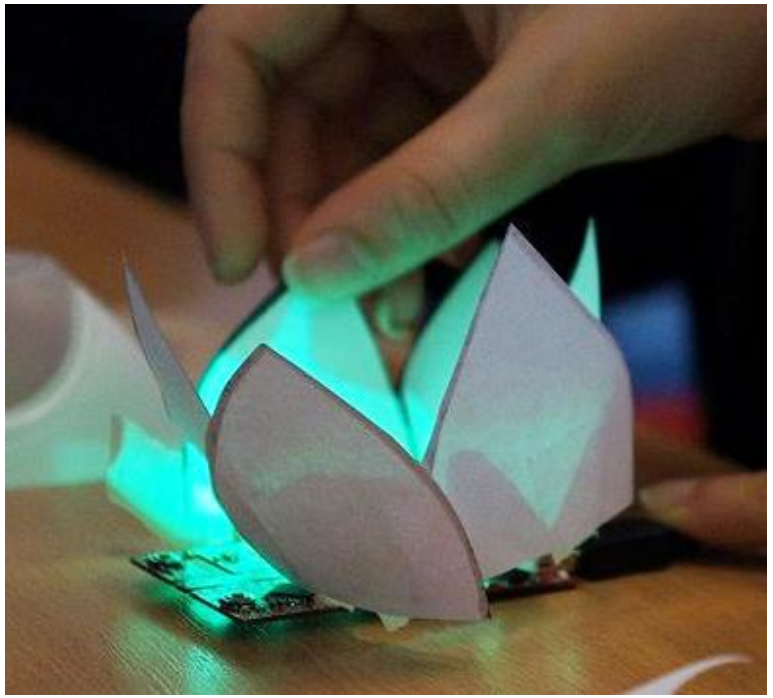
collaboration
with Simon Leigh



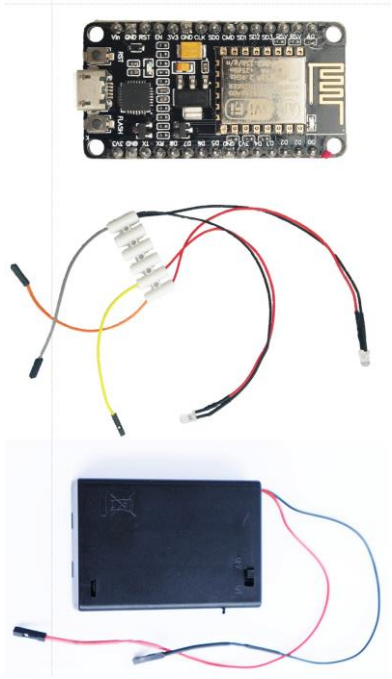


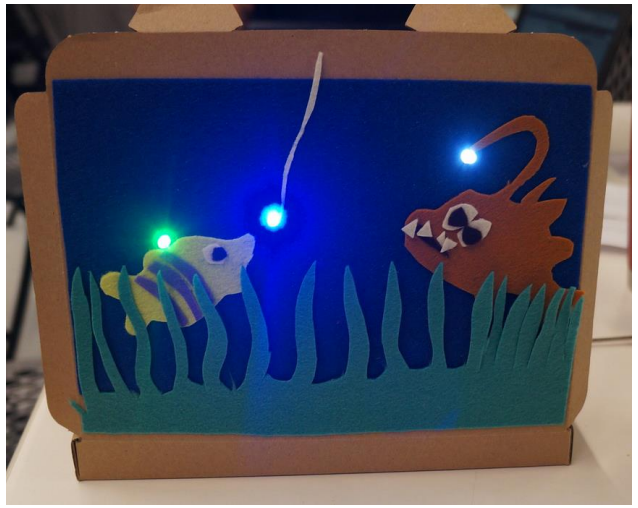


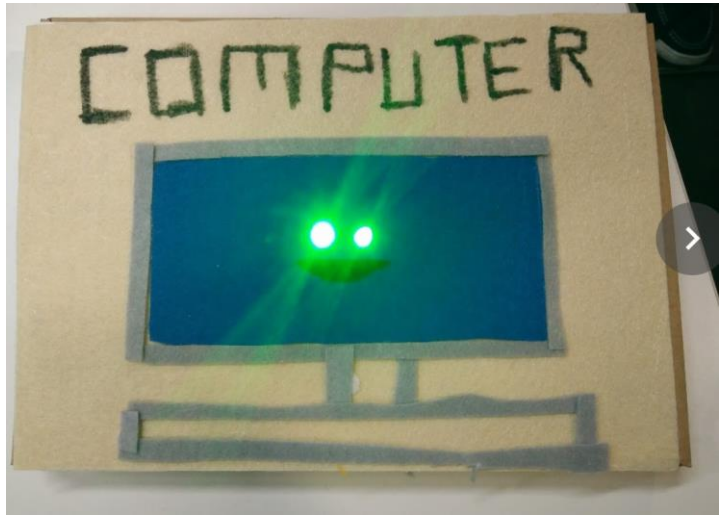




Tiles for Tales

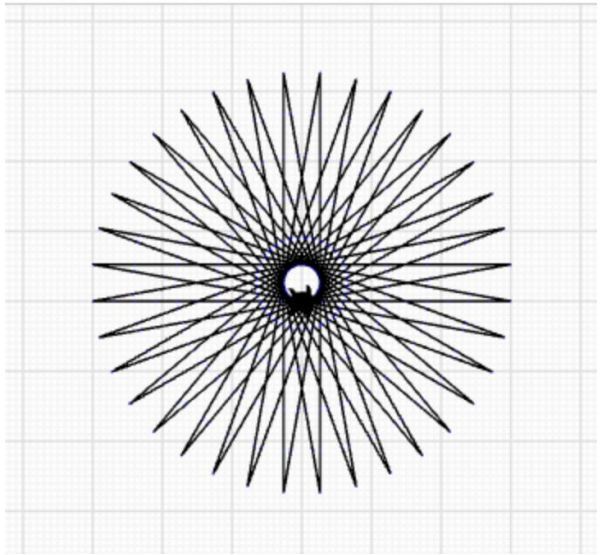


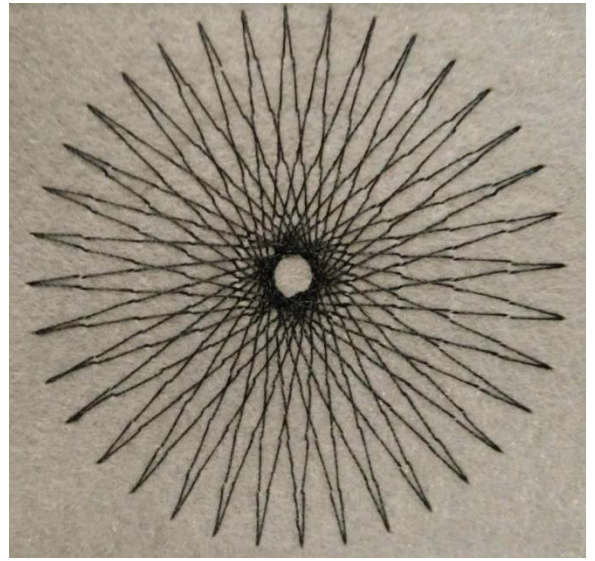


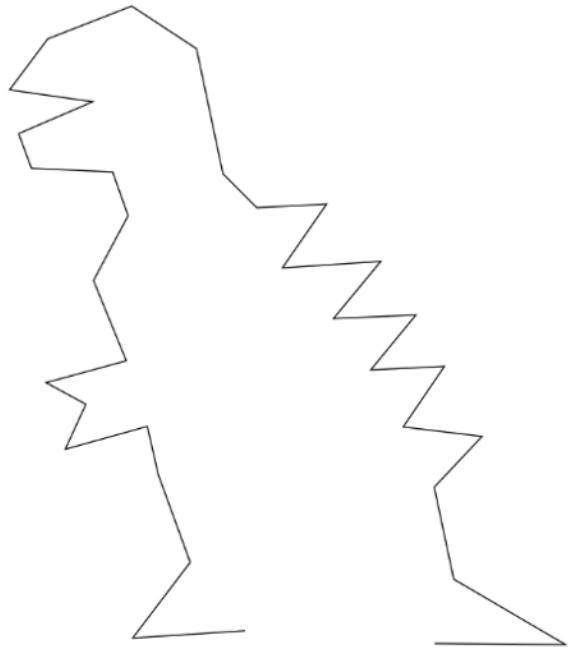


Turtlestitch

(developed by Andrea Meyer)







Hereward College co-creation project led by Diane Burton

Accessibility Options

HerewardCollege
PROMOTING INDIVIDUAL ACHIEVEMENT

National college for **young people** with **disabilities** and **additional needs**

search our website here Search

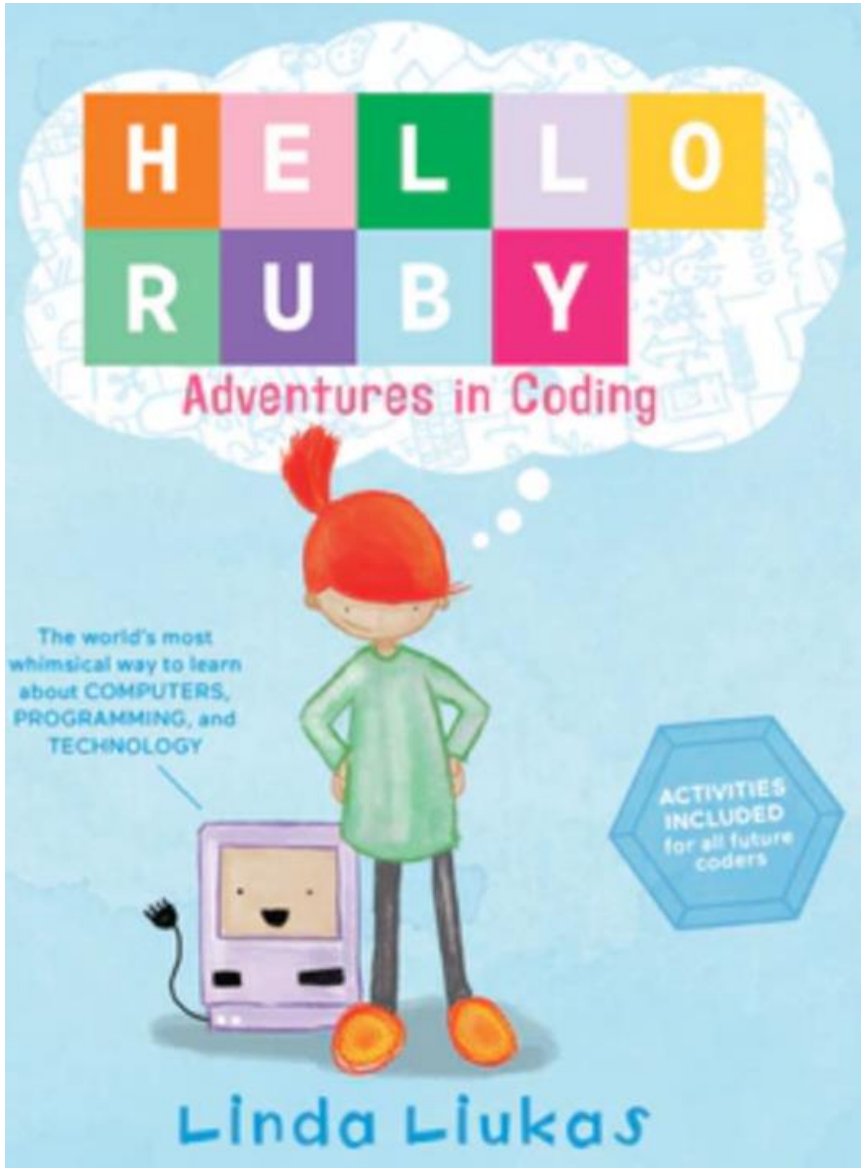
Hereward College uses revolutionary 3D printing equipment to help students with disabilities

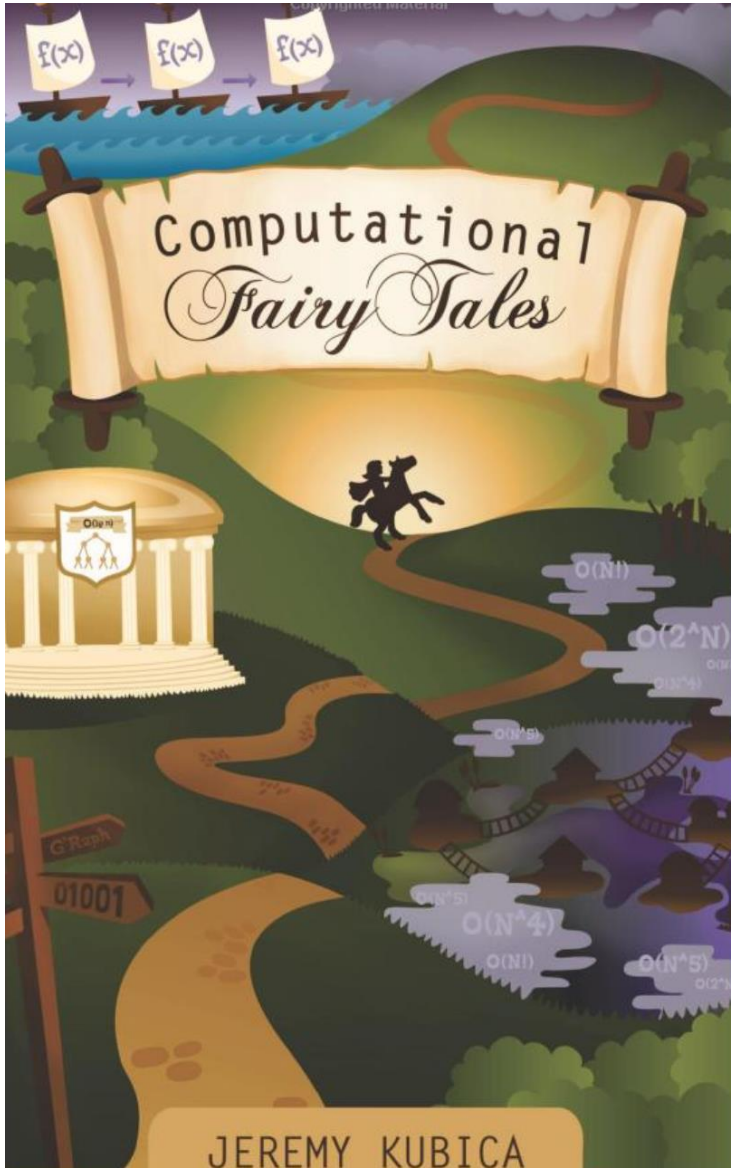
Posted on **13th Jan 2014**

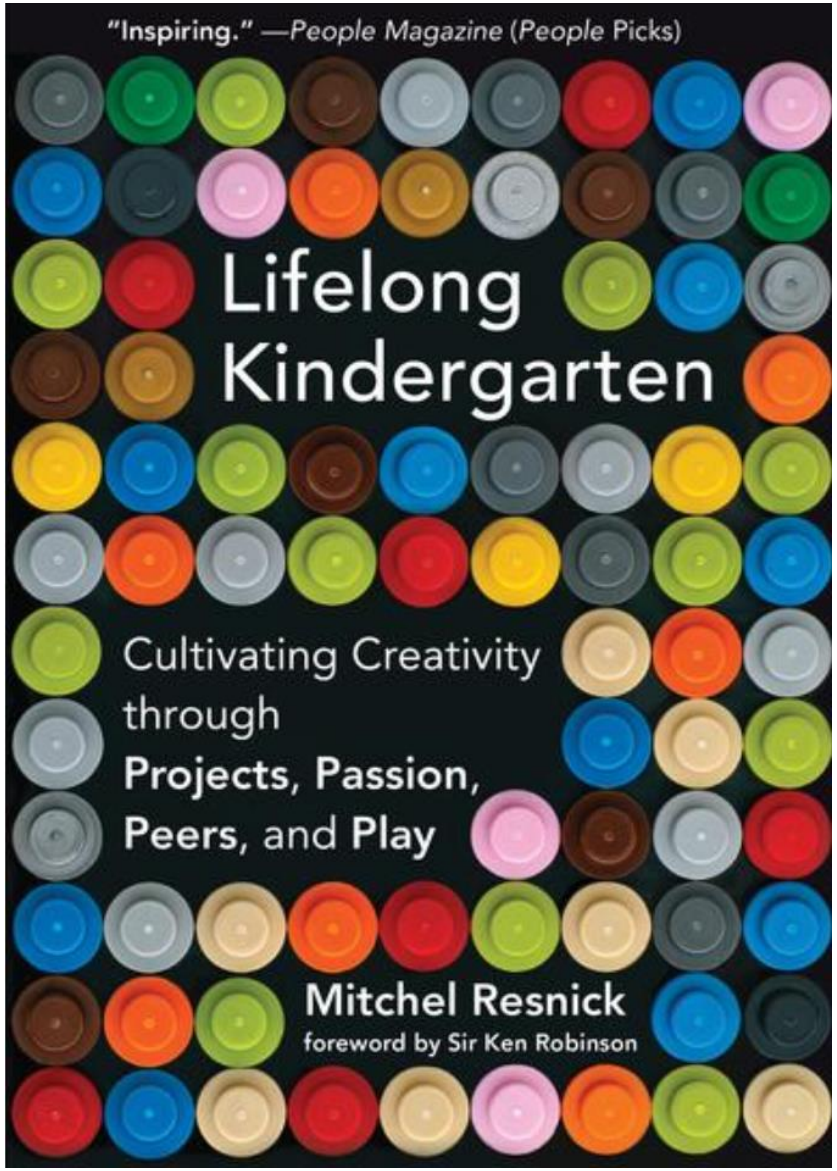
Content, Context and Community

[redacted] · 25 Jan 2017

3B really enjoyed their Scratch session with @WarwickVol :)


HELLO RUBY
Adventures in Coding
The world's most whimsical way to learn about COMPUTERS, PROGRAMMING, and TECHNOLOGY
ACTIVITIES INCLUDED for all future coders
Linda Liukas


f(x)
f(x)
f(x)
Computational Fairy Tales
JEREMY KUBICA


"Inspiring." —People Magazine (People Picks)
Lifelong Kindergarten
Cultivating Creativity through Projects, Passion, Peers, and Play
Mitchel Resnick
foreword by Sir Ken Robinson

TWENTY THINGS TO DO WITH A COMPUTER[1]

Seymour Papert

and

Cynthia Solomon

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
A.I. LABORATORY

June 1971

LOGO
Memo No. 3

1. Make a Turtle	11. Make a Music Box and Program A Tune
2. Program the Turtle to Draw a Man	12. Play with Semi-Random Musical Effects, then Try Serious Composing
3. Turtle Biology	13. Computerize an Erector Set Crane and Build a Tower of Blocks
4. Make a Display Turtle	14. Make a Super Light Show
5. Play Spacewar	15. Write Concrete Poetry
6. Differential Geometry	16. Try Computer Aided Instruction & Psychology
7. Draw Spirals	17. Physics in the Finger-Tips (how people balance things)
8. Have a Heart (and learn to DEBUG)	18. Explain Yourself
9. Grow flowers	19. Puppets
10. Make a Movie	20. Recursion Line - think up 20 more things to do.

TWENTY THINGS TO DO WITH A COMPUTER[1]

Seymour Papert

and

Cynthia Solomon

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
A.I. LABORATORY

June 1971

LOGO
Memo No. 3

15/20 still more to do!

1. Make a Turtle	√	11. Make a Music Box and Program A Tune	√
2. Program the Turtle to Draw a Man	√	12. Play with Semi-Random Musical Effects, then Try Serious Composing	√
3. Turtle Biology	√	13. Computerize an Erector Set Crane and Build a Tower of Blocks	
4. Make a Display Turtle	√	14. Make a Super Light Show	√
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