



Stichting NIOC

Stichting NIOC en de NIOC kennisbank

Stichting NIOC (www.nioc.nl) stelt zich conform zijn statuten tot doel: het realiseren van congressen over informatica onderwijs en voorts al hetgeen met een en ander rechtstreeks of zijdelings verband houdt of daartoe bevorderlijk kan zijn, alles in de ruimste zin des woords.

De stichting NIOC neemt de archivering van de resultaten van de congressen voor zijn rekening. De website www.nioc.nl ontsluit onder "Eerdere congressen" de gearchiveerde websites van eerdere congressen. De vele afzonderlijke congresbijdragen zijn opgenomen in een kennisbank die via dezelfde website onder "NIOC kennisbank" ontsloten wordt.

Op dit moment bevat de NIOC kennisbank alle bijdragen, incl. die van het laatste congres (NIOC2025, gehouden op donderdag 27 maart 2025 jl. en georganiseerd door Hogeschool Windesheim). Bij elkaar zo'n 1500 bijdragen!

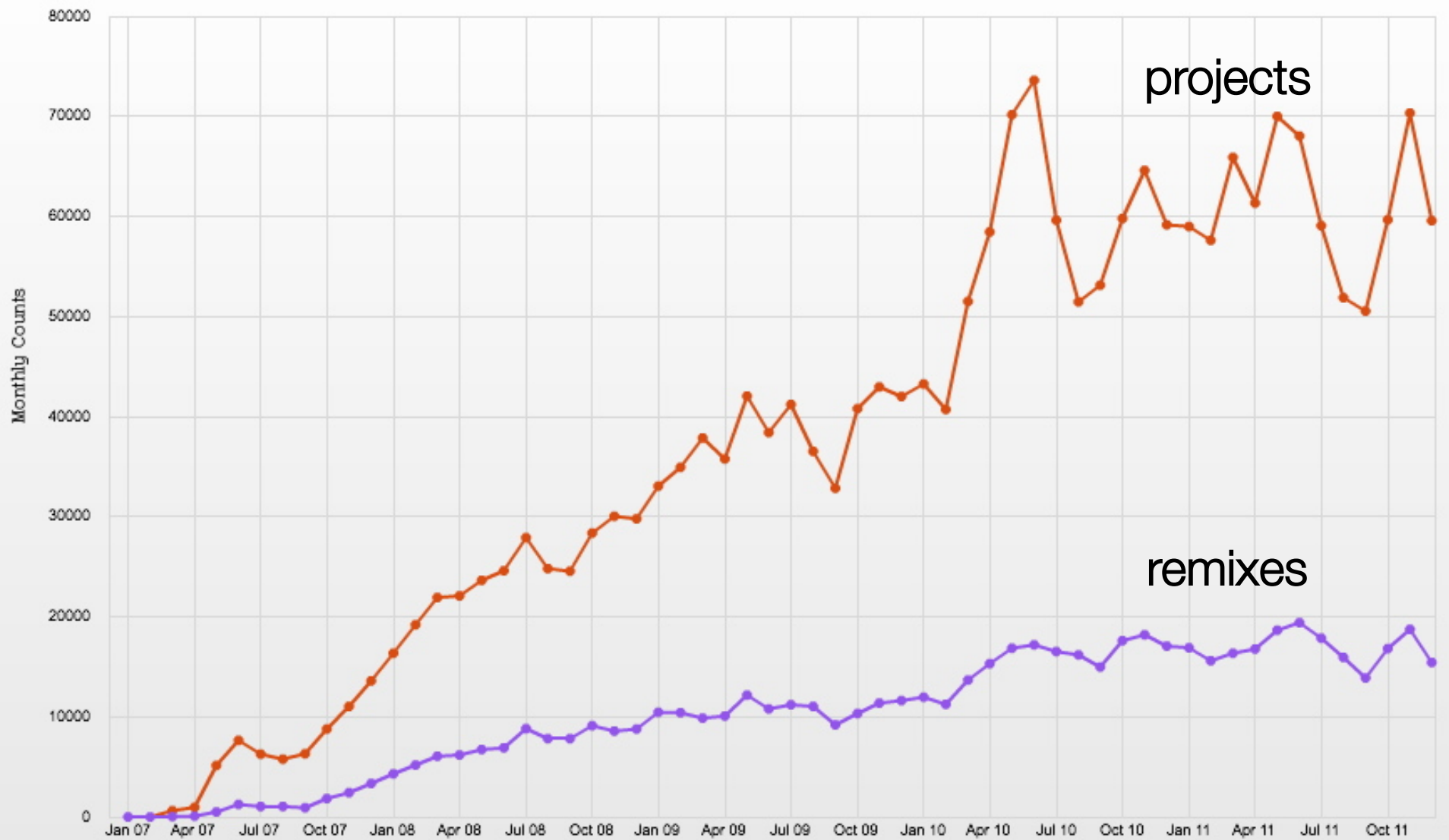
We roepen je op, na het lezen van het document dat door jou is gedownload, de auteur(s) feedback te geven. Dit kan door je te registreren als gebruiker van de NIOC kennisbank. Na registratie krijg je bericht hoe in te loggen op de NIOC kennisbank.

Het eerstvolgende NIOC vindt plaats op 18 maart 2027 in Arnhem en wordt georganiseerd door HAN University of Applied Sciences.

Reacties over de NIOC kennisbank en de inhoud daarvan kun je richten aan de beheerder:

R. Smedinga kennisbank@nioc.nl.

Vermeld bij reacties jouw naam en telefoonnummer voor nader contact.

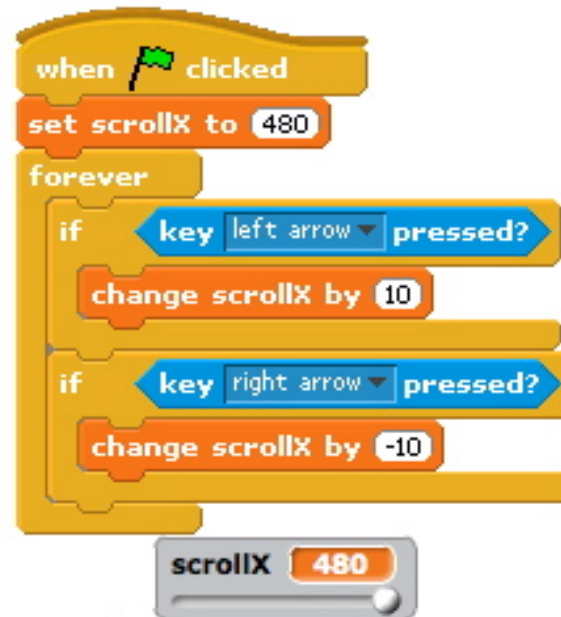


Scrolling Done Right

v37



This script is located on the stage.



Press the right arrow key to see the terrain sprites scroll past the screen.



[archmage](#) shared it 3 years, 9 months ago



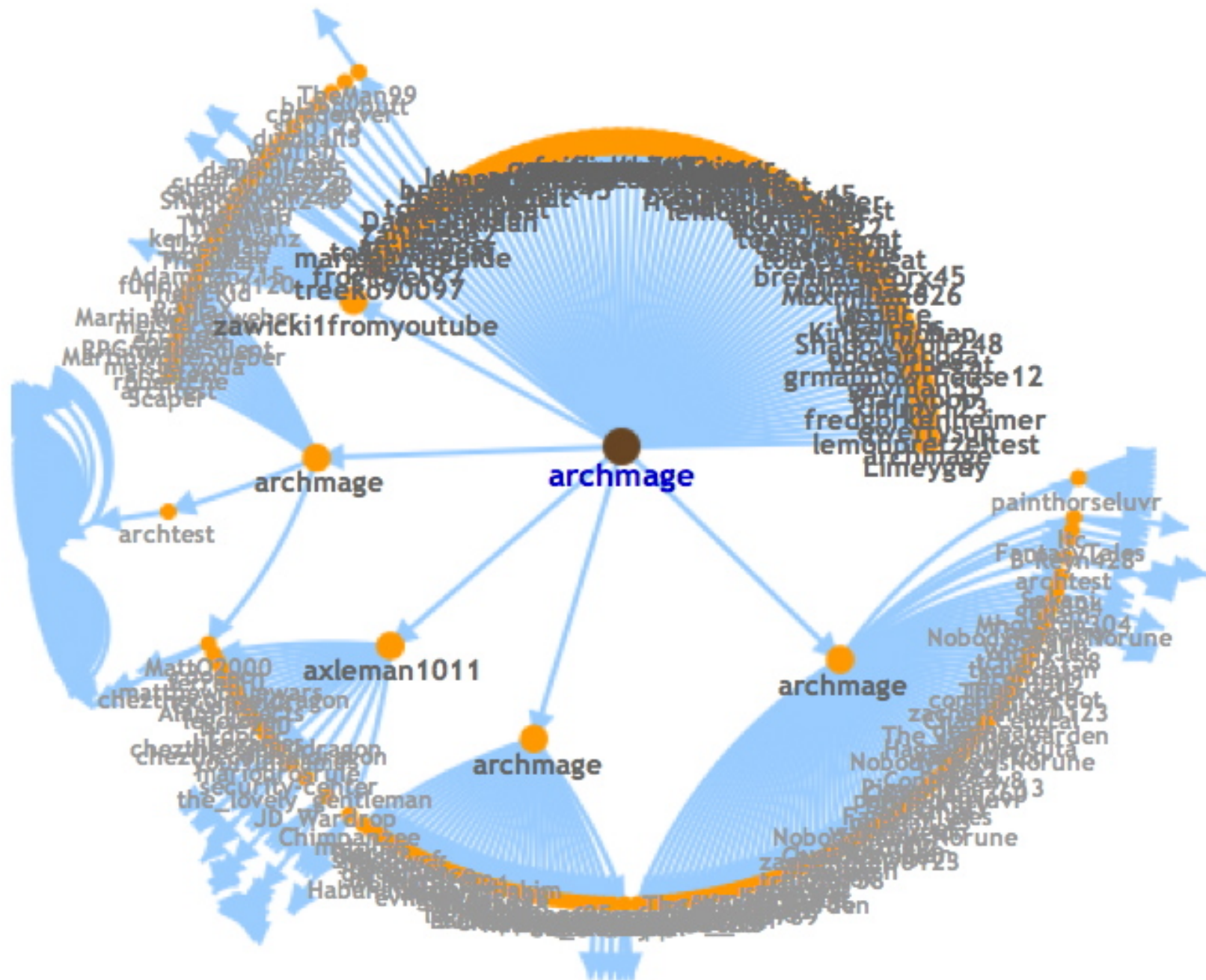
Some rights reserved

5051 views, [42 taggers](#), [129 people](#) love it , [460 remixes](#) by 291 people,
1208 downloads, in [29 galleries](#)

This script is located on the stage.



Press the right arrow key to see the terrain sprites scroll past the screen.



GRAY
BEAR



PRODUCTIONS



Panther - based on Scratch

[Home](#)[Projects ▼](#)[Support ▼](#)[Forums](#)[Download Panther](#)[Meet The Developers](#)[Contests](#)[Featured projects](#)[Panther Features](#)[Tutorials](#)[Upload a project](#)[Blockshop](#)

Many thanks to [Skystar](#) for this amazing image!

Panther - What the community wants

Panther is a programming language aimed at young users with only a small knowledge of programming. Panther offers you a more advanced version of Scratch, a simple programming language developed at MIT.

With a host of new features such as file and webpage manipulation and advanced colour sensing, cloning and much more besides, Panther provides advanced usage for avid Scratchers around the globe as well as new programmers looking for a fluid, easy to understand starting language. *Why not visit our [Wiki page](#) for a full list of our features?*

Welcome to ProgrammingFreak - our newest developer for Panther 1.1!

stats:

Panther

Blockshop

But...

**How do we make this
interestingness accessible to
more young people?**

Stories

Resources

Discussions

Members

Events

What is Scratch?

Scratch is a programming language that makes it easy to create interactive art, stories, simulations, and games – and share those creations online.

[Learn more »](#)

What is ScratchEd?

ScratchEd is an online community where Scratch educators:



share stories



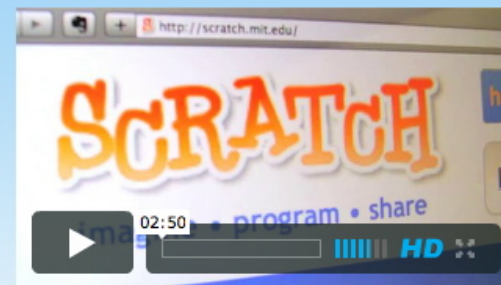
exchange
resources



ask questions



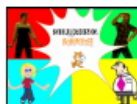
find people



Get Started with Scratch

Imagine the creative possibilities with Scratch and the online community in this intro video.

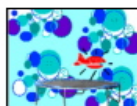
New Stories



Sharing with Scratch: Episode 5 - Publishing Scratch Work Online

Sharing with Scratch is a video webseries for Scratch educators to encourage thought and conversation around the ways in which Scratch can promote cooperation and collaboration in the classroom.

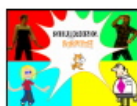
Aaron Morris posted this 2 days ago



Tech and Textile: An Interview with Gretchen Tanzer of Cape Cod Academy

Gretchen shares her story and strategies for integrating Scratch in a high school arts course.

ScratchEd Team posted this 4 days ago



Sharing with Scratch: Episode 4 - Checking in with a Neighbor

Sharing with Scratch is a video webseries for Scratch educators to encourage thought and conversation around the ways in which Scratch can promote cooperation and

New Resources

Actividad1 - on Spanish

Marisa Conde posted this 21 hours ago



Digital Schoolhouse Tutorial Video: Maths Quiz

ScratchEd Team posted this 3 days ago



Digital Schoolhouse Tutorial Video: Dance Moves

ScratchEd Team posted this 3 days ago



Digital Schoolhouse Tutorial Video: Making a Shape Calculator with Variables

ScratchEd Team posted this 3 days ago

Find a resource

Share a resource

New Discussions

Scratch News for the New School Year - ScratchNotes Newsletter, Vol. 4, Iss. 1

ScratchEd Team posted this 14 hours ago

New guide from Edutopia - Mobile Devices for Learning: What you Need to Know

ScratchEd Team posted this 17 hours ago

Super Scratch Programming Adventure! A new programming comic for kids

Tyler Orman commented on this 19 hours ago

Scratch 2.0 on Chromebooks

John Maloney commented on this 1 day ago

Members



All Members - Most Recently Online



Kim Wilkens

Member since: September 25, 2011

Last access: September 29, 2012

I love technology and teaching kids about the amazing ways it can be used to create and share their ideas, voices and passions with the world. Even though I have been a woman in computer science for...



Karol Linkiewicz

Member since: September 17, 2012

Last access: September 29, 2012

I'm a parent of 5 and 7, looking for truly interactive toys for them. Apparently Scratch fits this category perfectly :-)



CHIH JEN I FF

Find Others

Whether close by or far away, there are numerous Scratch educators around the world for you to connect with. Explore the map or browse the members list to find people with shared interests and experiences.

Create an account

Filter by member's interests:

Curricular Area:

- ☐ Computer Science
- ☐ Engineering
- ☐ Language Arts
- ☐ Mathematics
- ☐ Music
- ☐ Science
- ☐ Social Studies
- ☐ Teacher Education
- ☐ Technology
- ☐ Visual Arts
- ☐ Other

Education Level:

- ☐ Preschool and Kindergarten
- ☐ Elementary School
- ☐ Middle School
- ☐ High School
- ☐ College and University
- ☐ Professional Development
- ☐ Other

Language:

<Any>

CREATE YOUR WORLD

Scratch Goes to School

Judy Barbera

Sandra Reyes

David Grammerstorf

Nicole Hovsepian

Andrea Edwards

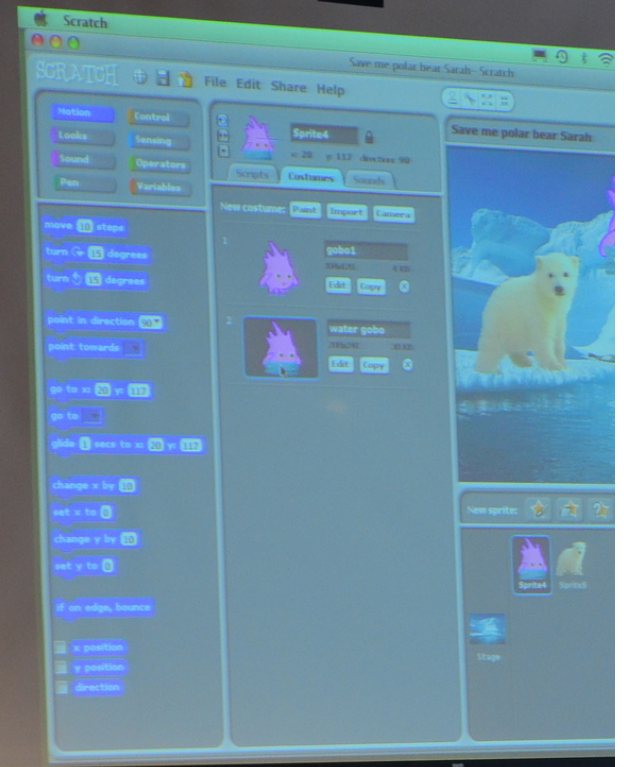
Genna Colonnato

Jacob Goodman

Jason Kardon

Sarah Katz

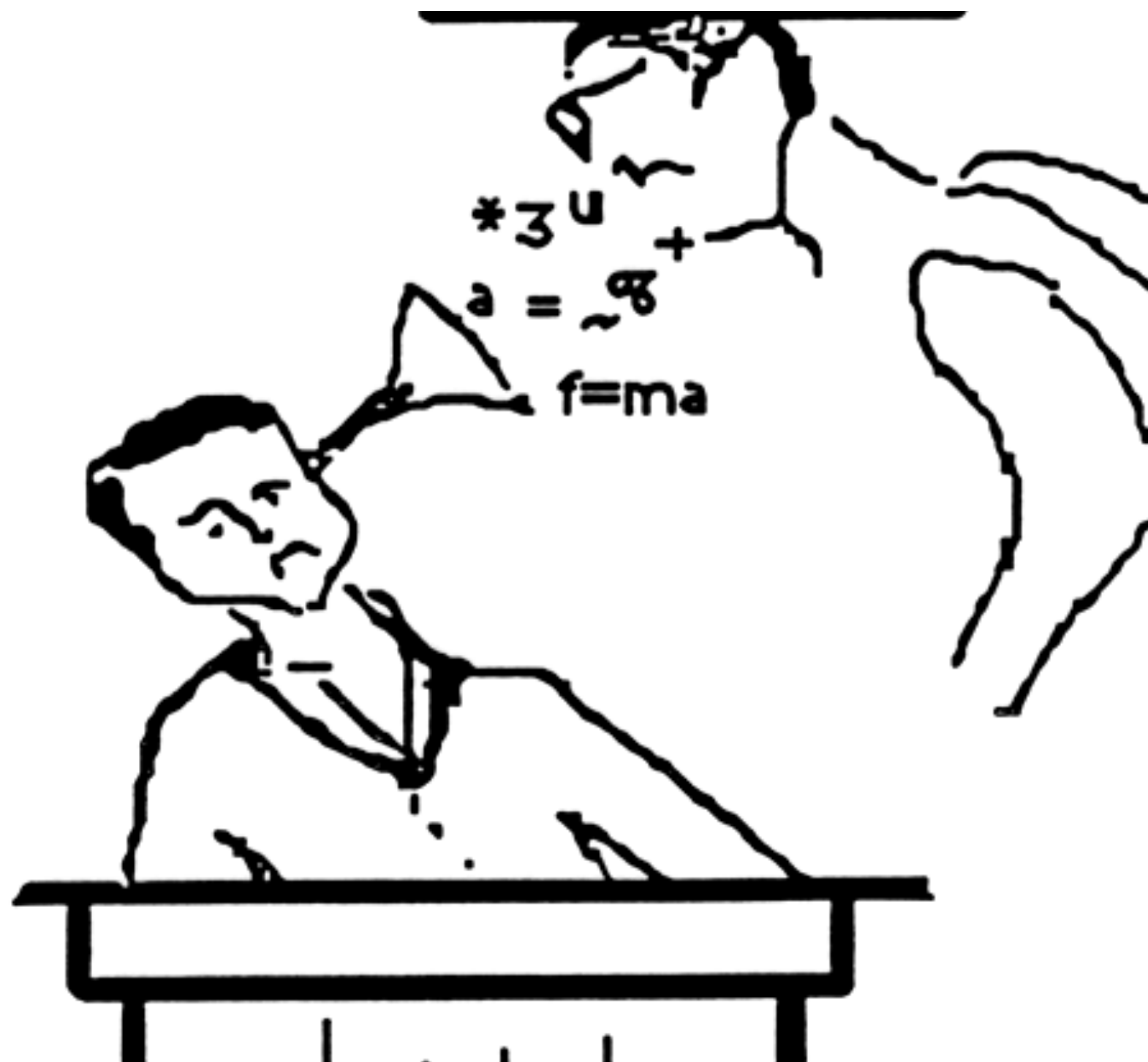
Joe Ligresti



CREATIVE COMPUTING
a design-based introduction to computational thinking

DRAFT
Friday, September 23, 2011

**Won't school destroy all of
the interestingness that
we see with
out-of-school learning?**



structure

Homogeneity in activity
Learning as individual process

**creating
connecting**

creating
connecting

SCRATCH



File Edit Share Help



Motion

Control

Looks

Sensing

Sound

Operators

Pen

Variables

move 10 steps

turn 15 degrees

turn 15 degrees

point in direction 90

point towards

go to x: 0 y: 0

go to

glide 1 secs to x: 0 y: 0

change x by 10

set x to 0

change y by 10

set y to 0

if on edge, bounce

☐ x position

☐ y position

☐ direction



Sprite1



x: 0

y: 0

direction: 90

Scripts

Costumes

Sounds



New sprite:



x: 231 y: 266



Sprite1



Stage

SUPER SCRATCH PROGRAMMING ADVENTURE!

COVERS
VERSION 1.4

LEARN TO
PROGRAM
BY MAKING
COOL
GAMES!



THE **LEAD** PROJECT



4 STAGE

SUPER SCRATCH PROGRAMMING ADVENTURE!
©2012, THE LEAD PROJECT

Now we'll add more programs to the Virus to keep score. These programs use blocks from the **Control** and **Variables** palettes to record and signal the conditions for winning and losing.

Program 4 creates a new variable called **score** and the conditions we need to meet for the script to broadcast **win**. Your score will now appear on the Stage.



Program 5 creates a variable called **chance**, which keeps track of how many times the Virus is allowed to touch the Server sprite before the player loses. We'll give Scratchy five chances to start. When you're out of chances, the program broadcasts **lose**. Just like the player's **score**, the number of tries the player has left is displayed on the Stage as **chance**.



Tip: When setting the rules for winning and losing in your games, use the greater-than symbol (>) or the less-than symbol (<) instead of the equal sign (=), as we do in programs 4 and 5. This will prevent the game from breaking when a variable changes too quickly!

Why might the variable change too fast in this game? Scratchy might touch the Virus a few times in quick succession, and the program won't realize that you've won the game.

chance

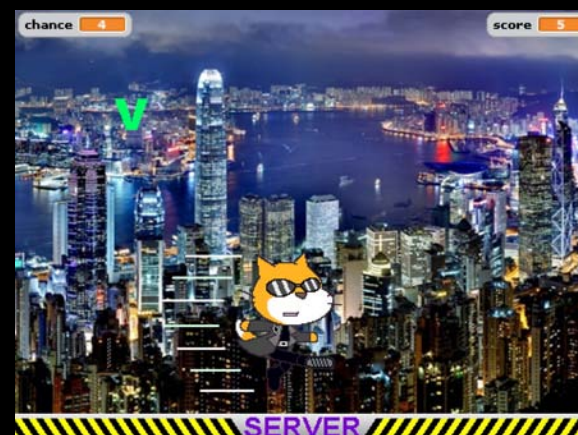
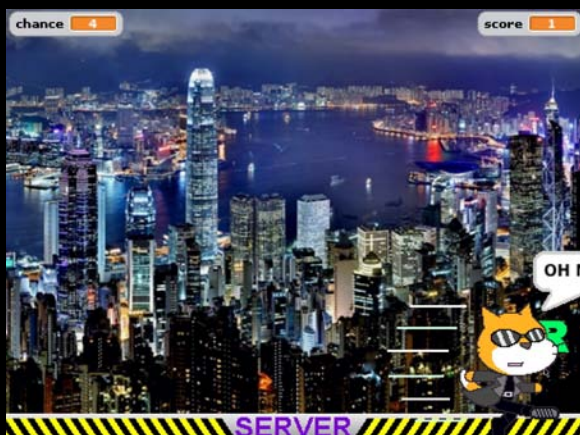
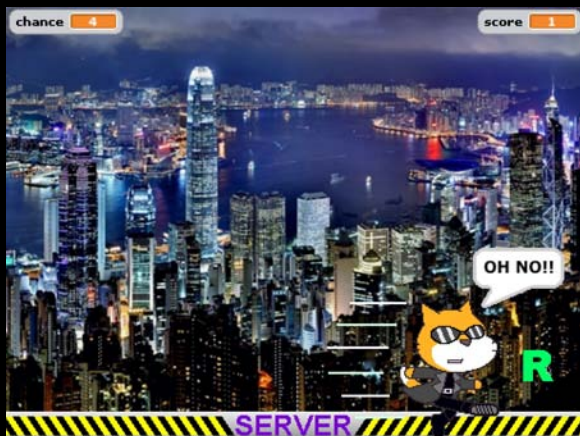
5

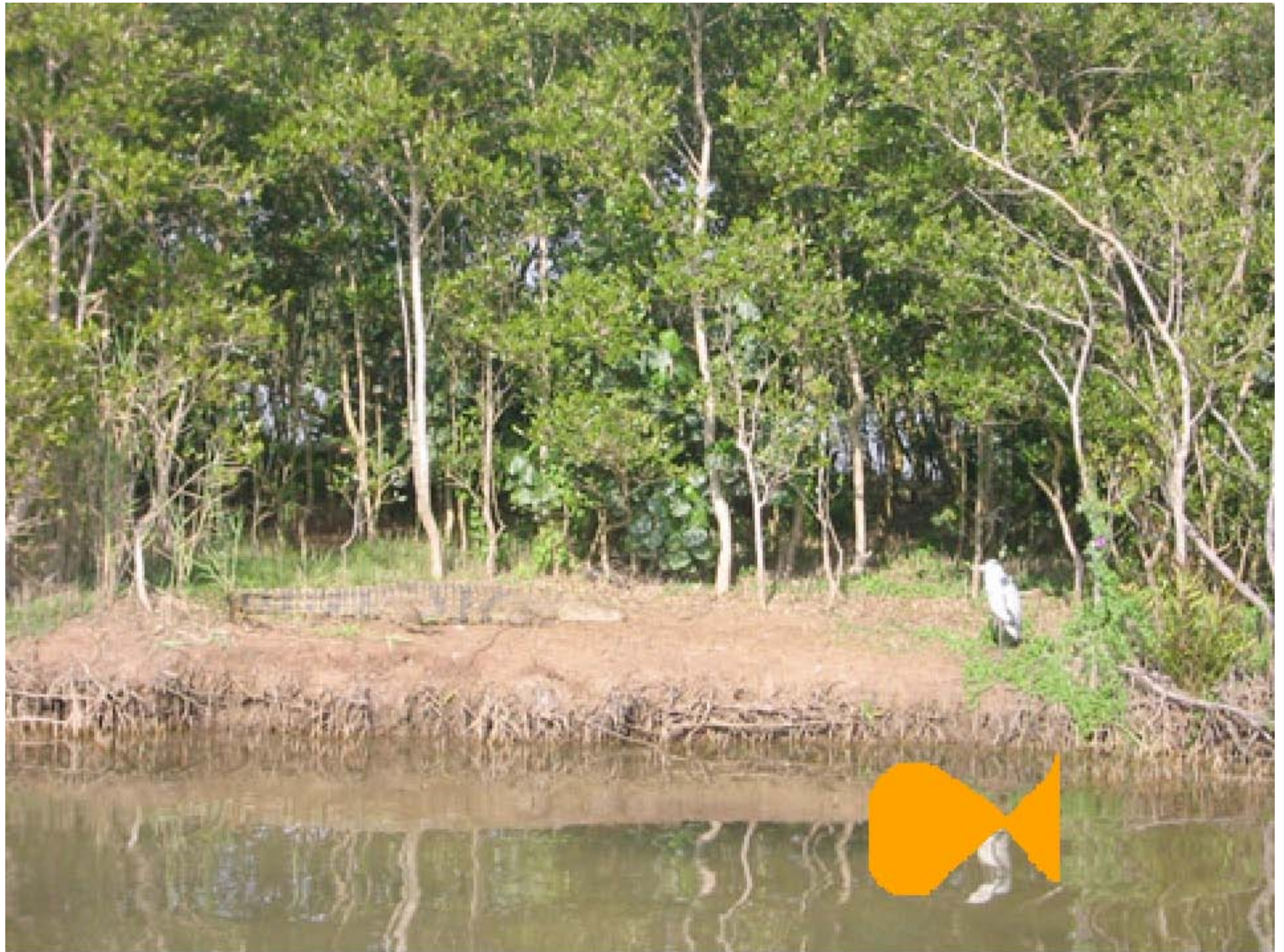
score

1

Protect Hong Kong!
Defend the server from virus attacks
Click your mouse to move Scratchy!
Press <SPACE> to start!

SERVER









When you do run into difficulties, it's not time to give up or cry.

It's time to think about the strategies that you have to solve your problem or to look for help.

No reason to break down or give up – you keep at it.

Taylor, Elementary School Teacher

creating
connecting



imagine • program • share

[home](#) [projects](#) [galleries](#) [support](#) [forums](#) [about](#)

Language ▾

[Login](#) or [Signup](#) for an account

search

Create and share your own interactive stories, games, music, and art

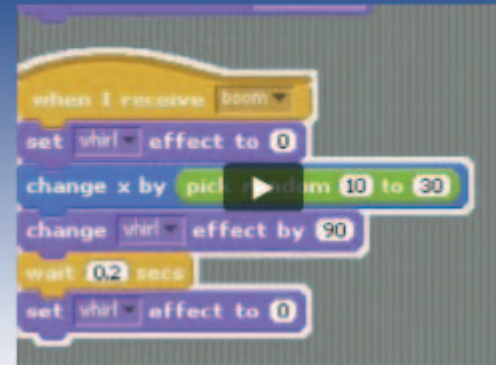
[Check out](#) the 3,225,784 projects from around the world!



To create your own projects:



Download Scratch



Featured Projects

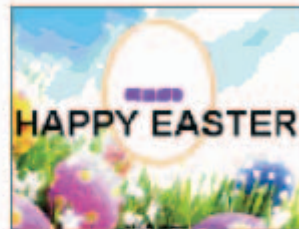
[See more](#) ▶



[Connexions](#)
by [richjones69](#)

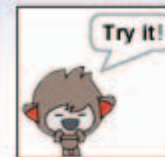


[Scratch 2.0 Updates!](#)
by [gobo](#)



[Make your own e...](#)
by [rootsroirol](#)

Scratch 2.0 Beta



Try out the Scratch 2.0 Beta, and help us make it better!

[Check it out](#) ▶

Scratch Day



Be a part of Scratch Day - a worldwide network of gatherings, where Scratchers come together to meet, share, and learn.

[Find out more](#) ▶

Projects Selected by ErnieParke

[Learn more](#) ▶



ScratchEd

----- Original Message -----

Subject: Checking for remixing

Date: Sat, 3 Dec 2011 17:35:19

From: -----

To: scratched@scratch.mit.edu

Hi, Is there a way for educators to simply check student work to determine how much is original, and how much was simply copied from the Scratch site? I don't want to upload individual projects from my students. I just want a way to see if the work is original or not. Thanks.

How are you using the Scratch website?

Coming from an English background, it was really important to me that there was a “publication” step. As a writer, the last step is always sharing, getting feedback, and critiquing.

My middle-schoolers are mostly inspired by the feedback they get from their peers and the gratification they get from sharing their projects in such a public way.

Jess, Middle School Teacher

So what's next?

**creating
connecting**

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



A creative learning community with **3,064,516** projects shared

[ABOUT SCRATCH](#) | [FOR EDUCATORS](#) | [FOR PARENTS](#)



Featured Projects



Tilt Cloud
by aaroncolin



Fish Tank
by CANSLP



Frogs on Logs
by learnegy

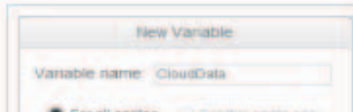


Scratch 2.0 Updates!
by gobo



2.0 BUBBLE
by Failord

Featured Studios



Fish Tank

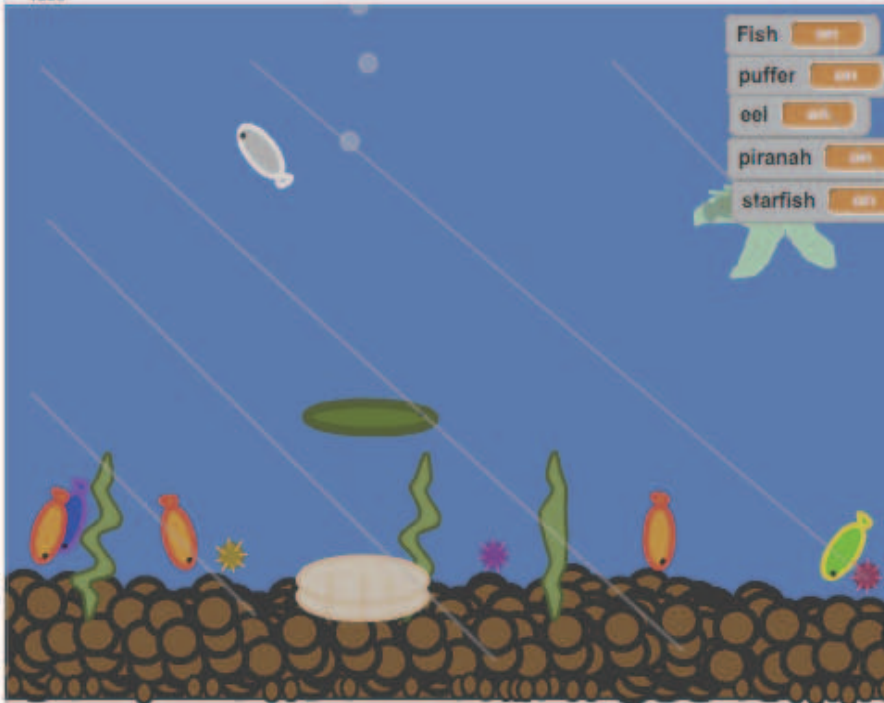
by CANSLP

26 scripts
19 sprites

See inside

☐ DRAFT

v260



Fish

puffer

eel

piranah

starfish

Instructions

Clicky clicky for BUBBLES!! (And a piranah attack, but, lets just think about the bubbles ok?)

Touch puffer w/ mouse for BOOM!

Touch eel w/ mouse for ZAP!

Click eel for MEGA ZAP!!!

Movable urchins!(Suggested by cheddagirl*)

Turbo mode for "Hyperactive fish". :3

Random starfish! (Suggested by ThePancakeMan)

Notes and Credits

This got featured!!!! YES!!!! SECOND ONE THIS YEAR!! (also I have 39 messages right now. *gasps*(now 40!)) Love it to suggest a fish.

simulations x

animations x

art x

© Shared on: 26 Feb 2013

Last modified: 4 Apr 2013



8



29

Share to

Add to

Report this



566



4

Comments (71)



Leave a comment

Remixes (4)

[View all](#)

Fish Tank Rema...
by Klinkang
14 views



Sprites New sprite: [New] [Duplicate] [Delete] [Camera]

Stage 1 backdrop

New backdrop: [New] [Duplicate] [Delete] [Camera]

Glass Seaweed Clam/Bub... Clam Bub... Fish1

Mouse Bu... Fish2 Fish3 Fish4 Fish5

Puffer Eel ZAP!! Star fish pirana

Scripts Costumes Sounds

Motion Events Control Sensing Operators More Blocks

Looks Sound Pen Data

move 10 steps

turn 15 degrees

turn 15 degrees

point in direction 90

point towards

go to x: 0 y: 0

go to mouse-pointer

glide 1 secs to x: 0 y: 0

change x by 10

set x to 0

change y by 10

set y to 0

if on edge, bounce

set rotation style left-right

x position

Backpack

Remix See project page

when green flag clicked

forever

go to x: 0 y: 0

set ghost effect to 60

go to front

Search =

Scratch v2.8.0 File Edit Tips karenb

Fish Tank by CANSLP

Remix See project page

Sprites Fish puffer eel piranah starfish

Scripts Motion Looks Sound Pen Data Events Control Sensing Operators More Blocks

move 10 steps
turn 15 degrees
turn 15 degrees
point in direction 90
point towards
go to x: 0 y: 0
go to mouse-pointer
glide 1 secs to x: 0 y: 0
change x by 10
set x to 0
change y by 10
set y to 0

Sprites New sprite: Stage 1 backdrop Glass Seaweed Clam/Bub... Clam Bub... Fish1 Mouse Bu... Fish2 Fish3 Fish4 Fish5 Puffer Eel ZAP!! Star fish pirana

Backpack
when green flag clicked
forever loop
go to x: 0 y: 0
set ghost effect to 60

x: 240 y: -180

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



A creative learning community with **3,064,516** projects shared

[ABOUT SCRATCH](#) | [FOR EDUCATORS](#) | [FOR PARENTS](#)



Featured Projects



Tilt Cloud
by aaroncolin



Fish Tank
by CANSLP



Frogs on Logs
by learnegy

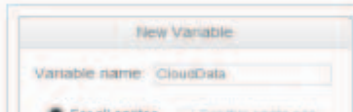


Scratch 2.0 Updates!
by gobo



2.0 BUBBLE
by Failord

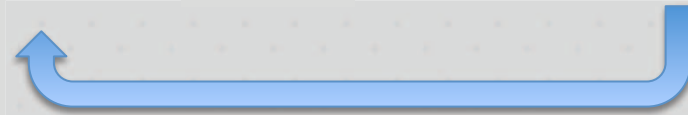
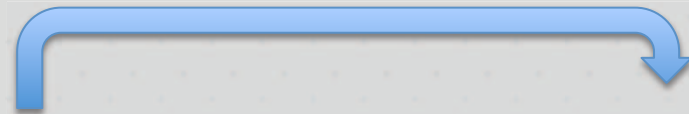
Featured Studios



in school vs. out of school

in school

out of school



“

Scratch lets you explore your imagination.
You design your own stuff, and once you start,
you just don't want to stop.
Because as you learn more, you can see there are
more possibilities, and the more possibilities there
are, the more you want to expand on what
you just learned.

”

Bradley, 12 years old



karen_brennan@gse.harvard.edu

<http://scratch.mit.edu/>
<http://scratch-ed.org/>