Computational Thinking Perspectives

ScratchEd Webinar Series
Monday, May 23, 2011
7pm-8pm EST
Hosted by Mitch Resnick and Karen Brennan



Resources

Map Satellite Hybrid

Asia

Asia

Atlantic Ocean

Africa

Pacific Ocean

Australia

Pacific Ocean

Australia

Powtrazia

Organizers

Forums

Attend an event

Scratch Day is a worldwide network of gatherings, where people come together to meet other Scratchers, share projects and experiences, and learn more about <u>Scratch</u>.

There are currently 125 events in 36 countries. Explore the map or check out the <u>events list</u> to learn more about Scratch Day events being planned around the world.

In 2010, there were 120 events in 40 different countries. Take a look at <u>last year's map and events list</u>.

In 2009, there were 120 events in 44 different countries. Take a look at the 2009 map and events list.

What will happen this year?

Organize an event

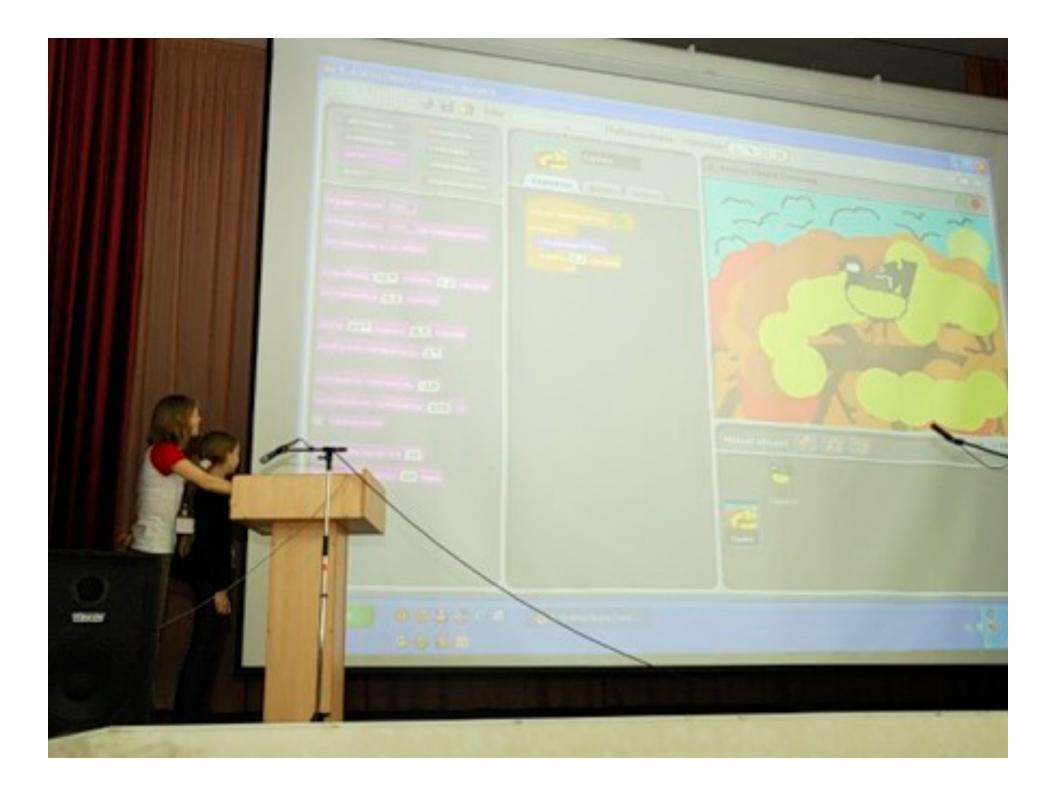
You can plan many different types of activities for Scratch Day. For example, you could organize:

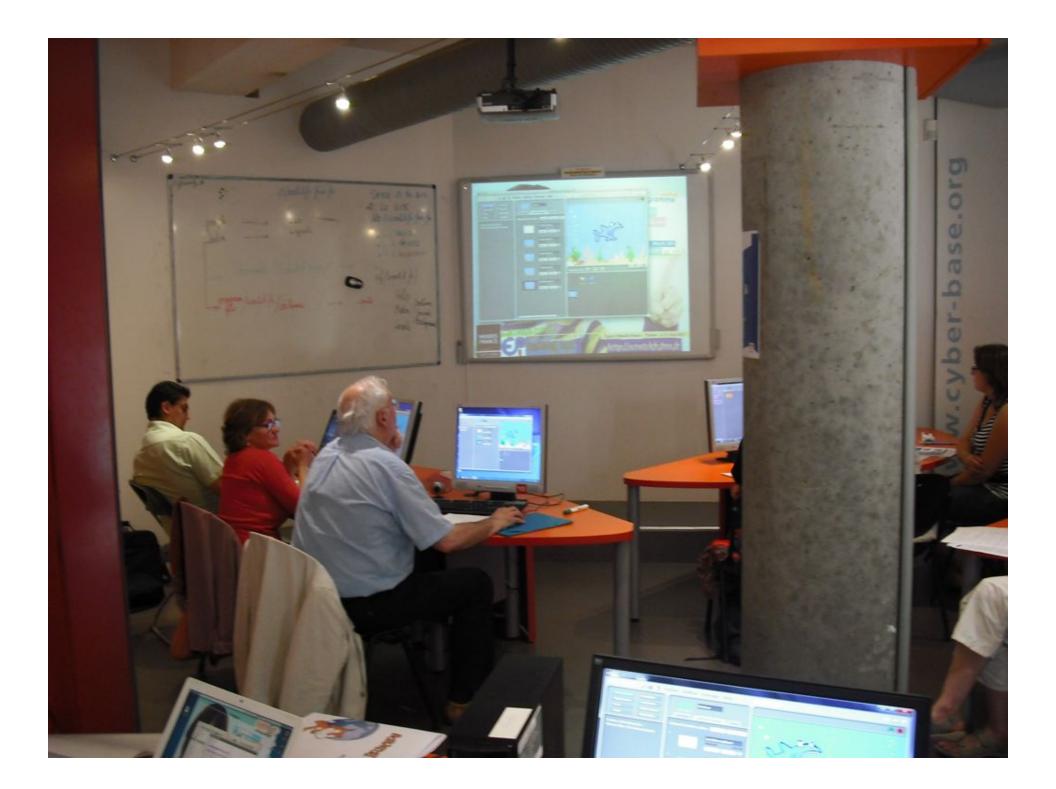
- hands-on workshops to introduce newcomers to Scratch
- exhibitions to showcase projects by local Scratchers
- sessions where educators share Scratch experiences
- informal gatherings where Scratchers can share ideas

This site was created to support people in planning Scratch Day events - big or small. There are <u>resources</u> to help design activities, and <u>forums</u> to discuss and ask questions. <u>Create an account</u> to start planning your Scratch Day event.

What will your Scratch Day look like?

















```
when I receive Redo▼
go to front
                                           when I receive End Game ▼
show
                                                                                              when A clicked
switch to costume Hang w
                                           hide
set Moving ▼ to 0
                                                                                              hide
                                                                                              set volume to 50 %
go to x: 0 y: -50
                                                                                              wait 1 secs
forever
                                                  when I receive Redo▼
                                                                                              forever if \(\) touching
       key right arrow ▼ pressed?
                                                  forever
                                                                                               set volume to 100
          Moving = 0
                                                          Moving = 3
                                                                                               play sound BellToll -
     set Moving ▼ to 1
                                                                                               broadcast Dead ▼ an
                                                          key right arrow ▼ pressed?
     point in direction 90 ▼
                                                                                               broadcast Redo▼
                                                       change x by 10
     switch to costume Hang w
     wait 0.1 secs
                                                           key left arrow ▼ pressed?
     repeat 3
                                                       change x by -10
      next costume
       wait 0.05 secs
                                                                                              when I receive End▼
       change x by 15
                                                                                             play sound BellToll -
                                                                                             hide
                                                  when I receive Level
     switch to costume Hang -
                                                  reset timer
           color 🧧 is touching 📕 ?
       set Moving ▼ to 0
                                                  repeat until ( Colns = 10 ) and (touching Goal ▼ ?)
      else
                                                    set Time ▼ to timer
       set Moving ▼ to 3
       switch to costume Fall
                                                  broadcast Button ▼
       repeat until (color is touching ?)
                                                  broadcast End▼
         change Scrolly ▼ by 10
```

Computational Thinking

Computational thinking is a fundamental skill for everyone, not just for computer scientists.

Wing, Computational thinking

Computational Thinking

Computational concepts (March 28, Recorded)
Computational practices (April 25, Recorded)
Computational perspectives (Tonight)

concepts

sequence conditionals

loops operators

parallelism variables

events lists

practices

incremental/iterative testing/debugging reusing/remixing abstracting/modularizing

perspectives

expressing connecting questioning

expressing

I can create.



imagine • program • share

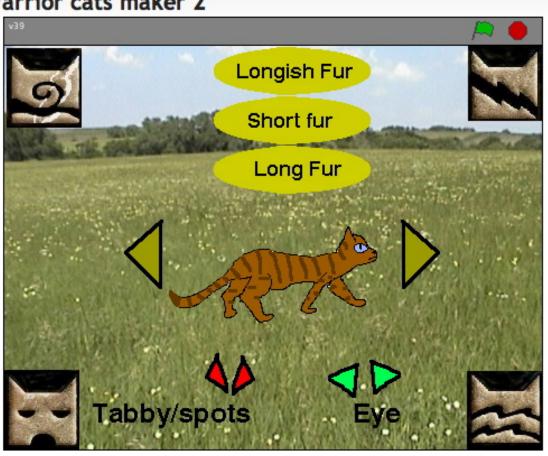
galleries support forums about home projects

Login or Signup for an account

Language

search

Warrior cats maker 2





Emberclaw shared it 2 years ago

(m) (5) Some rights reserved

905 views, 4 taggers, 32 people love it, 2 remixes by 2 people, 58 downloads, in 17 galleries



Add to my favorites?

Flag as inappropriate?

Download this project!



Download the 21 sprites and 67 scripts of "Warrior cats maker 2" and open it in Scratch



Project Notes

Make a warrior cat of the forest! Click the BIG greeny arrows to change fur colors, the little green arrows to change the color of the eyes, and the red arrows to change spots or stripes. And then click a warrior clan symbol to change the clan. Comment on it and say what your cat looks like, and make up a warrior cat name! Make a clan hero!

Tags

game art love fun cat meow warrior cats it maker make cat



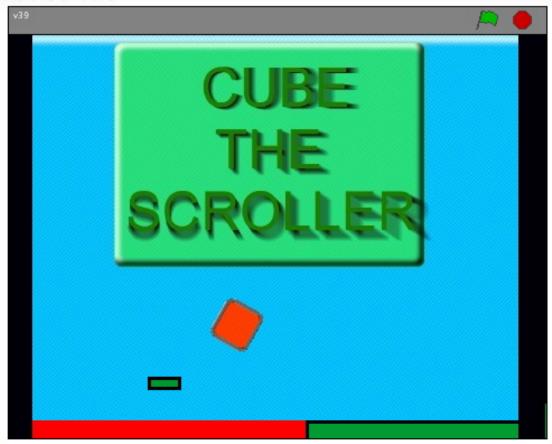
imagine • program • share

Login or Signup for an account

projects

galleries support forums about Language 🗷 search

Cube Scroller



Mr-Negitive shared it 2 weeks, 1 day ago

(m) (o) Some rights reserved

Based on Mr-Negitive's project

project!

Download this



Download the 33 sprites and 134 scripts of "Cube Scroller" and open it in Scratch

Project Notes

Click This Or Else You Will (link to project) Eat Pie Very Bad Pie

Cool Project (link to project)

Tags

game

music

pong

awesome

songs

cube

queen

viewed by whizzer

suarez

Add Tags

Add

2955 views, 7 taggers, 252 people love it, 13 remixes by 11 people, 795 downloads, in 31 galleries

"I like Scratch better than blogs or social networking sites like Facebook because we're creating interesting games and projects that are fun to play, watch, and download.

I don't like to just talk to other people online, I like to talk about something creative and new."

AV: What's your favorite part about Scratch?

Scratcher: Um, maybe that once you upload the whole working thing that you have a project. Or maybe it's just the creativity of Scratch.

AV: What do you mean by that? Can you tell us a bit more about what it means to be creative with Scratch?

Scratcher: Well it's just that there's endless possibilities. It's not like you can just make this project or this project and that's all that you can make.

connecting

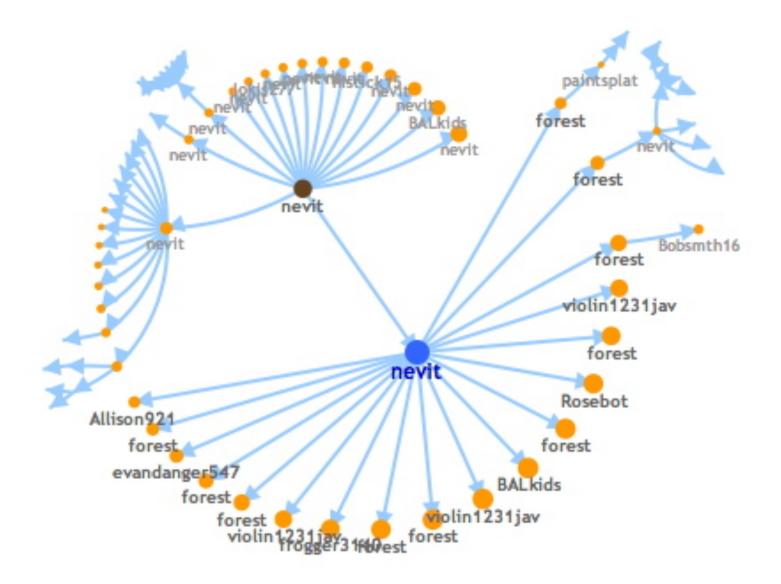
I can do different things when I have access to others.

creating with others

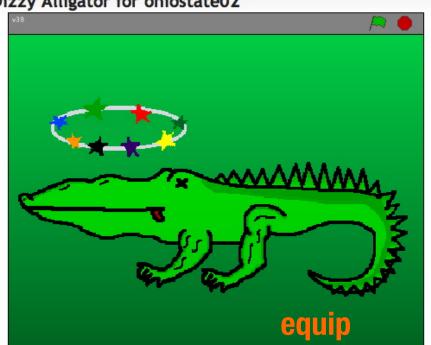
co-creation, co-authoring

creating for others

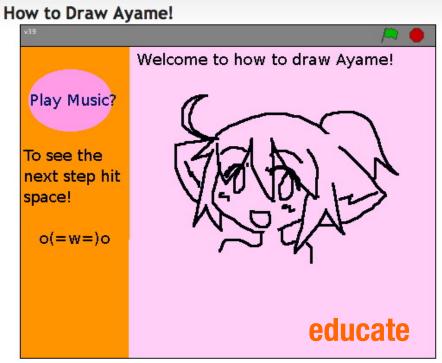
intentional audience







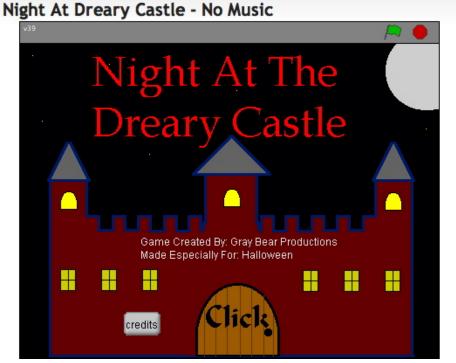












questioning

I can ask questions to make sense of the world.



imagine • program • share

 home
 projects
 galleries
 support
 forums
 about
 Language

 Login
 or Signup
 for an account
 search

Sim City: Evolution





Simtropolis shared it 1 year, 1 month ago

Some rights reserved

Based on Simtropolis's project

124 views, 2 taggers, 1 person loves it, 7 downloads

Download this project!



Download the 46 sprites and 162 scripts of "Sim City: Evolution" and open it in Scratch

Project Notes

IF IT STARTS WITH PEOPLE AND THING JUST WAIT A SECOND FOR IT TO REGEN!

This is the extension to my game City creator! it has new features!

NEW FEATURES: Added roads, Happiness, unhappiness, pollution (or air), and jobs!

If the air bar is below 0 (or negative), it means it's polluted. If it's above 0, it's clean air.

PS: The monument and rocket make 200 happy, but cost \$1,000,000! "I love Scratch. Wait, let me rephrase that – Scratch is my life. I have made many projects.

Now I have what I call a 'programmer's mind'.

That is where I think about how anything is programmed. This has gone from toasters, car electrical systems, and soooo much more."

Panther - based on Scratch

Home Projects ▼ Support ▼ Forums Download Panther Meet The Developers Contests













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!

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Panther

Blockshop

Cultivating CT perspectives

expressing

- supporting a diversity of creations connecting
- supporting collaborative activities, connecting online questioning
 - looking beyond Scratch

Thank You!

http://scratched.media.mit.edu http://events.scratch.mit.edu

Next webinar: Educator Show & Tell

Monday, June 27, 2011

7pm-8pm EST

http://www.surveymonkey.com/s/2011-05-webinar