# **Tech News**

### Scratch 1.1

The scratch team at MIT has just released a new version of scratch, which can be downloaded from the mit.scratch.edu web site. The differences from earlier versions are described in the release notes:

http://scratch.mit.edu/pages/release-notes

The most exciting differences to me were the ability to do polyphonic music (multiple notes at once) from a single sprite and the new repeat-until block.

```
when clicked

repeat until mouse down?

repeat until touching edge ?

move 10 steps

wait 0.05 secs

turn 112 degrees

move 30 steps
```

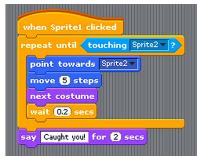
This scratch script causes the sprite to bounce around on the screen until the mouse is held down.

I would like to encourage all the Tech Club programmers to try to eliminate the "forever" and "forever-if" loops whenever possible, and to use "repeat-until" loops instead. Most of the time this will result in cleaner code, and it is closer to standard programming languages. Also, scratch runs faster if there are fewer scripts running, and both types of "forever" loop can only be stopped by "stop script" or "stop all".

To get multiple notes from a sprite, you still need to have multiple scripts running in parallel, but now each script gets its own MIDI channel for notes, rather than one channel per sprite. Actually, it is now two channels per script, since drums and notes have always been separate channels.

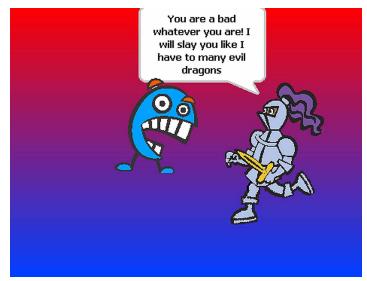
You can also now export and import sprites cleanly, though there is not yet any way to share sprites on the MIT web page, except as whole projects. Several prewritten sprites are available, including JetPack Girl and Painting Unicorn. Download the new scratch and browse the sprites! The Things directory has a lot of simple, good ideas.

This script will make Sprite1 chase Sprite2, when Sprite1 is clicked. When Sprite1 finally catches Sprite2, the script continues with the "Caught you!" announcement.



## Graham's program gets recognition

Graham's program *FoodChain* is now part of the standard release of Scratch (under Stories)!



#### **Alice**

Today we'll demonstrate a different programming language—one that uses full 3D graphics. "Alice" is not as easy to use as scratch, but it has some interesting features: like fog effects and being able to attach one object to another so that they move together. Alice is available for free download from

http://alice.org/

#### **Maker Faire**

This Saturday and Sunday, May 19 and 20, are the Maker Faire at the San Mateo Fairgrounds. This is *Make* magazine's 2nd annual show. For more information see http://makerfaire.com/ Abe and I are planning to go, and Graham's family is too. It is supposed to be a great time for both techies and artists (ask Graham for info about last year's Maker Faire).