Issue 3

Tech News

Report on second meeting

The Spring Hill Tech Club continues to grow, with three new kids last week. We now have 10 kids involved (2 4th, 7 5th, and 1 6th grader). At this rate we'll soon be running out of computers, as there are only eight in Bob's classroom. If we get more kids, it would be useful for parents who can lend laptops to their kids to do so.

Flash drives remain the best way to transfer files between home and school. We had some technical difficulties with the older machines, and I have asked Norvin to install the appropriate drivers. As a temporary workaround, we can use floppy disks to transfer files from the old machines to a new machine to write the flash drives. New flash drives are available cheap from http://www.pexagontech.com

On the old machines whose sole USB port is used by the monitor, there are extra USB ports hidden on the bottom of the monitors. These ports have very little clearance around them, so we were not able to plug in an iPod nano, but skinny flash drives seemed to fit ok.

We looked a little at getting sprites to interact last week, and the kids were all very intent on continuing the animations they had started. As with the first meeting, parents had to drag their kids away from the meeting.

The programming tools the kids have so far are somewhat limited. I've been relying mainly on the kids needing a particular programming construct before showing them how to use it individually, but this means that they all have learned different subsets of the language. Lectures and directed exercises would move the kids along faster, but working on their own projects is more fun, and Tech Club is supposed to be fun learning, not more classwork.

This Week

We may work on sounds this week or on importing images to use as sprites. I'll bring my digital camera, so that I can take pictures of one or two kids so that they can include themselves in their animations.

I'm also going to encourage kids looking for new ideas to do dance or name animations, as these use more complex programming than the story-line animations that many have started on. (Note: I'm not going to discourage the kids who are doing story animations, but if they want to do a new project, I'll point to the examples of dance and name animations.)



Here is a dancer sprite that Abe created over break: we'll show his animation as an example of a dance animation.

Programming tip

You can use messages to make a storyboard script for your story. The messages can be sent from any sprite, but the stage is a good place to put overall control. Different sprites can respond to the same message, providing coordinated action, and one message can trigger other broadcasts.

when I receive on stand
wait 3 secs
broadcast routine 1 - and wait
broadcast routine 2 and wait
broadcast routine 3 and wait
broadcast done 🔻
wait 0.5 secs
broadcast end and wait

Here is an script from the "stage" of Abe's Dancer program, showing the overall flow for the dance. Note that it starts from a message sent at the end of the entrance script, and controls the sequence of five

other scripts. The broadcast mechanism is also good for repeated actions (like dance moves).

Running scratch at home

There are pointers to the version of scratch we are using (as well as some example programs) at

http://www.soe.ucsc.edu/~karplus/scratch_programs The information at

http://llk.media.mit.edu/projects/scratch/wanthelp/ may be particularly useful in getting ideas and learning features of the language. The example programs that come with the scratch download are also worth exploring for ideas.