

Designing Real-World Interfaces in the Classroom

**Bill Van Loo
Honey Creek Community
School
Ann Arbor, MI**

Learn what interfaces are,
and how teaching about
them can help prepare your
students.

Who am

I?

Before going into teaching,
I worked as a Web
developer and interaction
designer in Detroit.



After doing that for 8 years,
I became a certified teacher.



I'm now the Technology Specialist for Honey Creek Community School in Ann Arbor, Michigan.



Bits

and

Atoms

are both my friends.

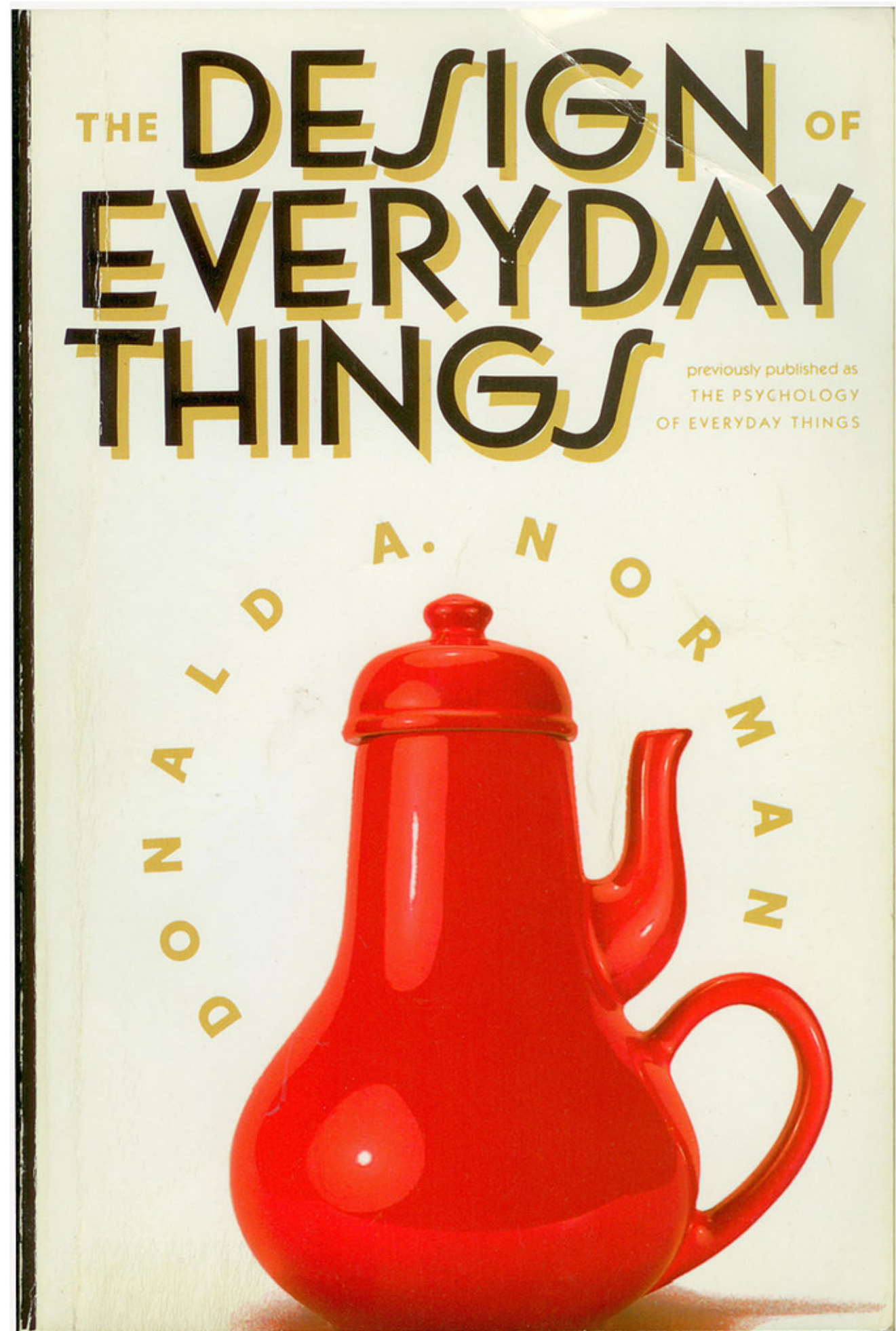
Free,
Cheap
and
Open
Source

**What is
an
interface?**

An interface is the combination of **hardware** and **software**, designed to work together as a control.



My
favorite
book on
interface
design.



3

examples

with

demos

Scratch Games

Here's what Scratch looks like.



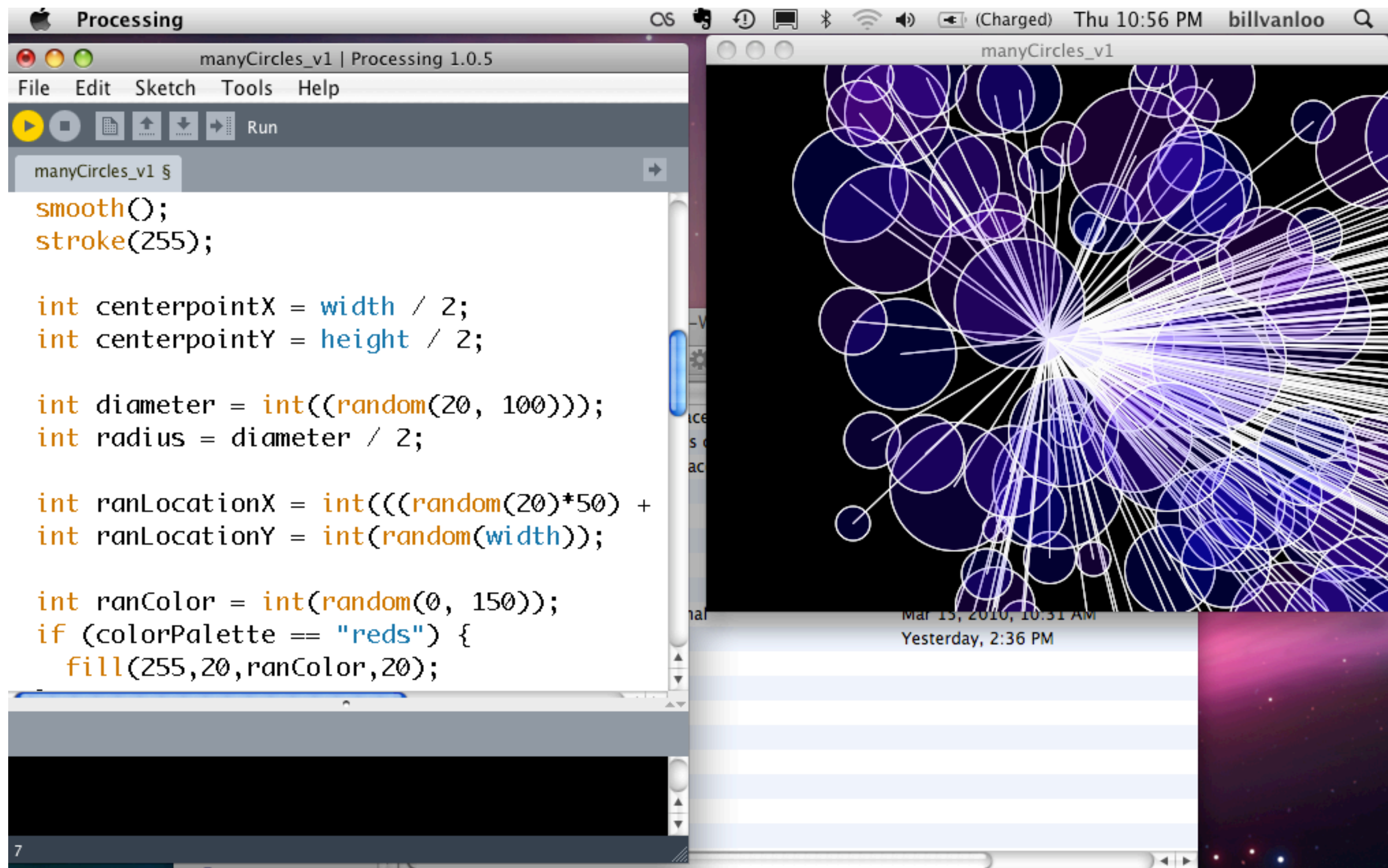
4th & 5th grade students were given the opportunity to create a game or interactive story using Scratch.



Scratch DEMOS

Designing Interactivity with Processing

Here's what Processing looks like.



Middle School
students were
given this
Design Brief
template for
their
interactivity
projects.

Programming with Processing Design Brief

Basic Information

Student Name:

Project Name:

Design Brief

For this project, I will create...

Sketches

The following sketches show what my project will look like:



Resources

In order to create my project, I will need...

Processing DEMOS

Assistive Technology: One-Button Games

For High Point



Step 1:

Identify Problems & Opportunities

Step 1:

Identify Problems & Opportunities

Your job today is to observe and ask questions to find out what problems and opportunities exist in Hasana's classroom (C6).

Step 1:

Identify Problems & Opportunities

Your job today is to observe and ask questions to find out what problems and opportunities exist in Hasana's classroom (C6).

You will write down your observations on a sheet of paper that you take with you.

Step 1:

Identify Problems & Opportunities

Your job today is to observe and ask questions to find out what problems and opportunities exist in Hasana's classroom (C6).

You will write down your observations on a sheet of paper that you take with you.

What would be good to notice and carefully observe?

Step 1:

Identify Problems & Opportunities

Step 1:

Identify Problems & Opportunities

Design Brief:

Step 1:

Identify Problems & Opportunities

Design Brief:

You will design, build and test a 1-button game for the students in C6.

Step 1:

Identify Problems & Opportunities

Design Brief:

You will design, build and test a 1-button game for the students in C6.

Requirements:

Step 1:

Identify Problems & Opportunities

Design Brief:

You will design, build and test a 1-button game for the students in C6.

Requirements:

- Your game must use only one button (the space bar) to be played

Step 1:

Identify Problems & Opportunities

Design Brief:

You will design, build and test a 1-button game for the students in C6.

Requirements:

- Your game must use only one button (the space bar) to be played
- You may use either Keynote or Scratch to create your game

Step 1:

Identify Problems & Opportunities

Design Brief:

You will design, build and test a 1-button game for the students in C6.

Requirements:

- Your game must use only one button (the space bar) to be played
- You may use either Keynote or Scratch to create your game
- You must have no more than one word per screen (words are optional)

One-Button Game DEMOS



Thank You!



For a complete list of links I
referenced, please go to:
billvanloo.com/teaching/

E-mail me at:
bill@billvanloo.com