VVVV application

<https://en.wikipedia.org/wiki/Vvvv>

Built an open map for programming sound and applications

Each node in a map has special functions underneath with meanings and use.

Each node has inputs and outputs

**Neurosky:** Brainwave (see pdfs)

HAS color filter

Left click adding a node

Right click changing values

Complete menu middle click

<https://www.wired.com/2014/11/watch-artist-control-pools-water-brainwaves/>

Day 2

Pdf download

<https://en.wikipedia.org/wiki/Gouraud_shading>

Kinect 1 and 2

Infrared

Chris Milk The Creators Project

<https://www.youtube.com/watch?v=_2kZdl8hs_s>

From Dennis Nowack:

"Control i" to get to advanced settings box for all elements.... Projekt kinect:  
Skeleton element for kinect coordinate table joint position output to ioBox  
Getslice (spreadx) connect to output from iobox field with all 20 cinect sensors, set index to 7 for having the hand (0 is center), input size 3 for all 3 axes, output are now 3 values. 3 more get slices for x, y, z you can get the 3 values separated  
After using quad and renderer, quad output to renderer, transform output to 2nd quad input. Then x and y and z connect to X y and rotate. Damper between the xyz values and transform to make the movement smooth.  
Improvement:  
Gourouddirectional (3d ambient) output to renderer, new element teapot connect output to 2nd input Gourauddirectional and connect transform to 3rd input of gourauddirectional.  
Improvement 2:  
Click 2 times left onto transform and change to 3d transform  
Side Example  
Colladafile element and mesh of a person to control a digital walking man with own body (connecting all skeleton elements to the avatar)  
Improvement 3  
Element camera: connect output 2 and 3 to 2nd last and last input from renderer  
Improvement 4  
Element avoidNil: before damper  
Improvement 5  
Copy first get slice for the right instead of the left hand. Control D for duplicating. After duplicate the big block that catches the 3 coordinates  
Elements transform output in 3rd input and sphere output in 2nd input of gourauddirectional, then element group and connect both gourauddirectional output into the group element, group output to the renderer input  
Tipp alt enter to full-screen the renderer and control 8 to get rid of the title row  
Improvment  
Let the object zoom while walking back and forth. Set a map object between the z dumper and the transform object (on inputs 5 and 6)