

Visual & 3D Programming dengan Open Source

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Pekerjaan : Konsultan & Advokat Open Source

Perusahaan : Rimbainux.com

Sebelumnya : Birmingham City Council, Takaful

Institusi : AOSI (Asosiasi Open Source Indonesia)

Komunitas : Linux, Ubuntu, ISNET.org. dll



Programming with Open Source

- Powerful
- Biaya murah
- Mudah mendapatkan bantuan (lebih banyak pengguna)
- Membuat kita lebih paham mengenai komputer
- Fleksibilitas
- Tidak ada jalan buntu
- Kepuasan : code yang Open Source bisa terus bermanfaat (tidak hangus / hilang begitu saja)
- Dan, sekarang juga sudah banyak yang mudah :
Visual / 3D Programming



3D & 2D Programming : Dulu

```
less — ttyp2 — 97x27 — #1

    shldl ecx,ebp,22                // begin calculating third pixel (y units
)
    shldl ecx,ebp,6                // begin calculating third pixel (x units)
    addl   ebp,ebx                 // advance frac pointer
    andl   ecx,4095                // finish calculation for third pixel
    shldl edx,ebp,22                // begin calculating fourth pixel (y unit
s)
    shldl edx,ebp,6                // begin calculating fourth pixel (x units)
    addl   ebp,ebx                 // advance frac pointer
    andl   edx,4095                // finish calculation for fourth pixel
    movl   eax,[_ds_colormap]
    movl   ebx,eax
    movb   al,[esi+ecx]            // get first pixel
    movb   bl,[esi+edx]            // get second pixel
    movb   al,[eax]                // color translate first pixel
    movb   bl,[ebx]                // color translate second pixel

    testl   [pixelcount],0fffffffh
    jnz     hdoubleloop            // at least two pixels to map
    jmp     hchecklast

    .align 16
hdoubleloop:
    shldl ecx,ebp,22                // begin calculating third pixel (y units
:[]
```

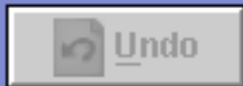
Alice 3D

- <http://alice.org>
- True 3D
- Bisa digunakan untuk membuat Virtual worlds
- Berbasis Java
- Dibuat oleh Carnegie Mellon University
- Tersedia untuk Linux, Windows, dan Mac

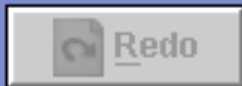




Play



Undo



Redo



World

- Camera
- Light
- lake
- IceSkater



Events [create new event](#)

When the world starts ,
do [World.my first method](#)

IceSkater's details

properties **methods** functions

- skate [howManySteps](#) [edit](#)
- spin [edit](#)
- do simple spin [edit](#)
- skate backwards [howManySteps](#)
- jump [edit](#)
- prepare to skate [edit](#)
- [create new method](#)
- IceSkater [move](#)

World.my first method

World.my first method *No parameters* [create new parameter](#)

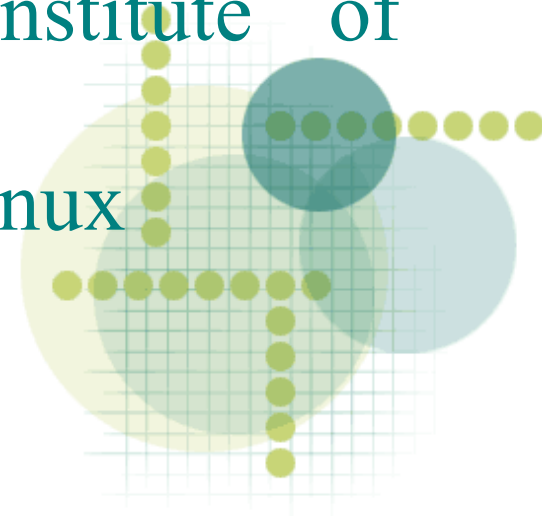
No variables [create new variable](#)

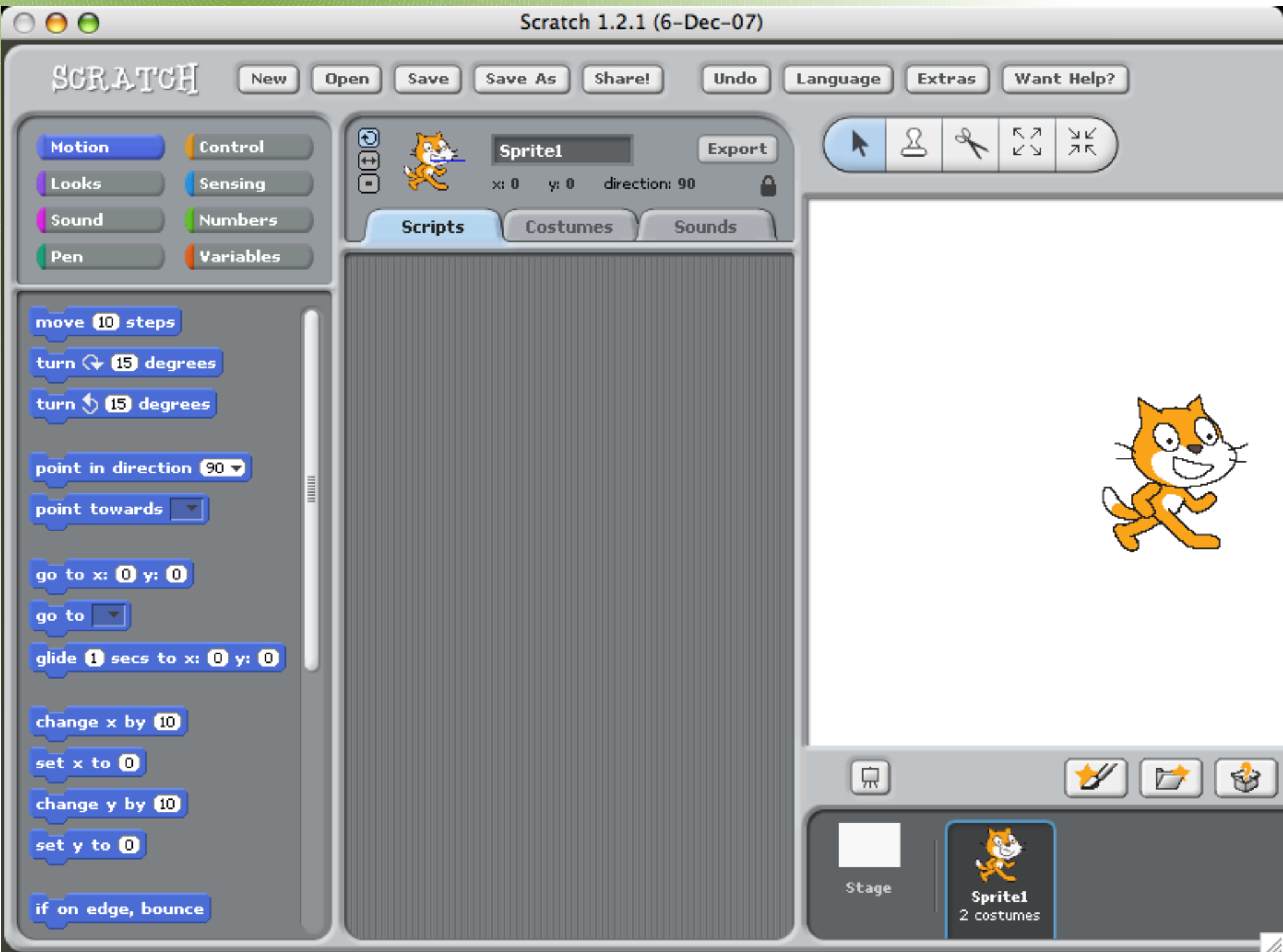
- IceSkater.prepare to skate
- IceSkater.do simple spin

[Do in order](#) [Do together](#) [If/Else](#) [Loop](#) [While](#) [For all in order](#)
[For all together](#) [Wait](#) [print](#) [//](#)

Scratch

- <http://scratch.mit.edu>
- 2D engine + scripting
- Penggunaan : Animasi, Live book, Multimedia, Games
- Bisa dijalankan dari browser (ala Flash)
- Dibuat oleh MIT (massachusetts institute of technology)
- Native di Mac & Windows, ported to Linux





Thank You

Questions ?

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