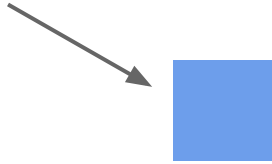


Pixel Art: 1.0

Square is Cool!



by Astra Wijaya (astrawijaya.com)
with
Tech Valley Game Space

What is on the menu today?

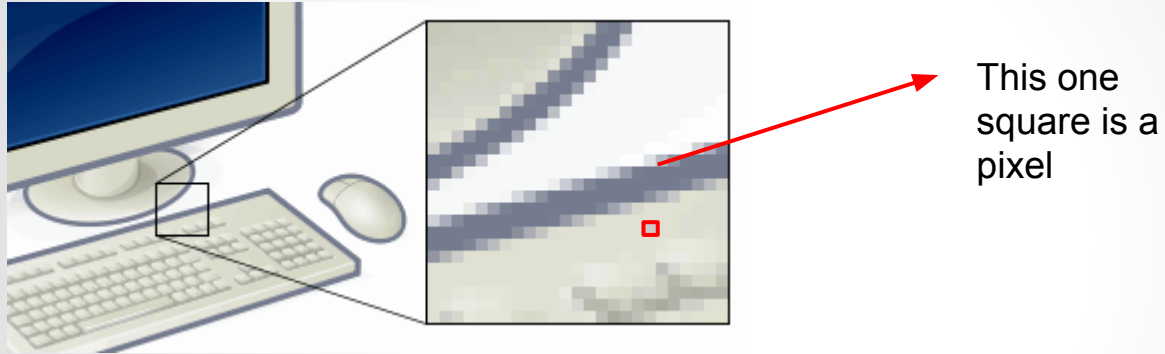
1. Introduction
2. History
3. Software setup
4. Playing with pixels
5. Resources

0.1 Some questions

- Does anyone know how/is learning to draw (digital or traditional)?
- Familiar with Photoshop/Piskel/other image editing software?
- Who is using what software?

1.1 What is a pixel?

- From the words, *picture* and *element*.



"Pixel-example" by ed g2s • talk - Example image is a rendering of Image:Personal computer, exploded 5.svg.. Licensed under CC BY-SA 3.0 via Wikimedia Commons - <https://commons.wikimedia.org/wiki/File:Pixel-example.png#/media/File:Pixel-example.png>

1.2 What is pixel art?

- Drawing or editing on the pixel level that now has become a style of its own.



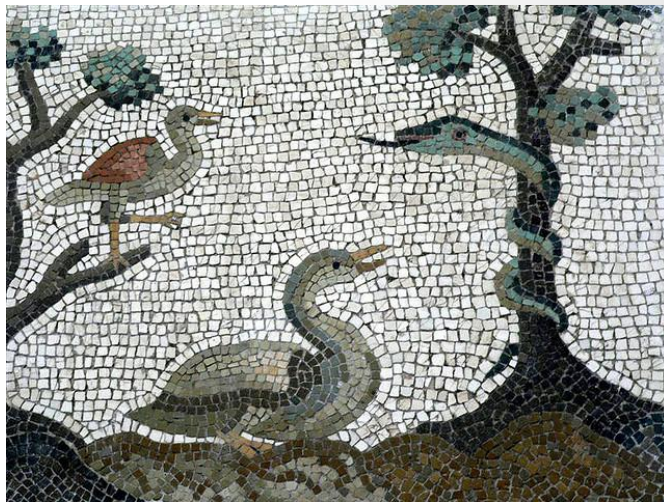
2.1 History

- Came from hardware processing limitation
- Not able to draw or render too many colors



2.1 History

- Very similar to mosaic art

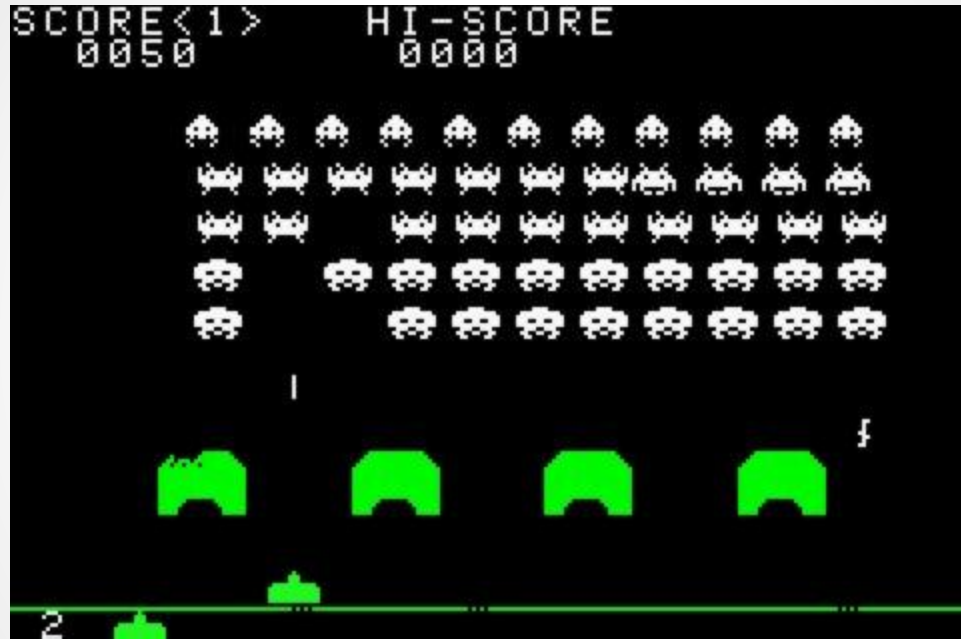


2.2 Visual History



Pong (1972)
Credit: Amintore Fanfani

2.2 Visual History



Space Invaders (1978)

2.2 Visual History



Pac Man (1980)

2.2 Visual History



Donkey Kong [arcade] (1981)

2.2 Visual History



Super Mario Bros (NES)
(1985)

2.2 Visual History



SF



SFII



SF ZERO



SFIII



SFIV

Ryu (Street Fighter series)
1987+

2.2 Visual History



Nintendo DS



Super NES

Chrono Trigger (1995)

2.2 Visual History



Metal Slug series (1996+)

2.2 Visual History



Castlevania: Symphony of the Night (1997)

2.2 Visual History



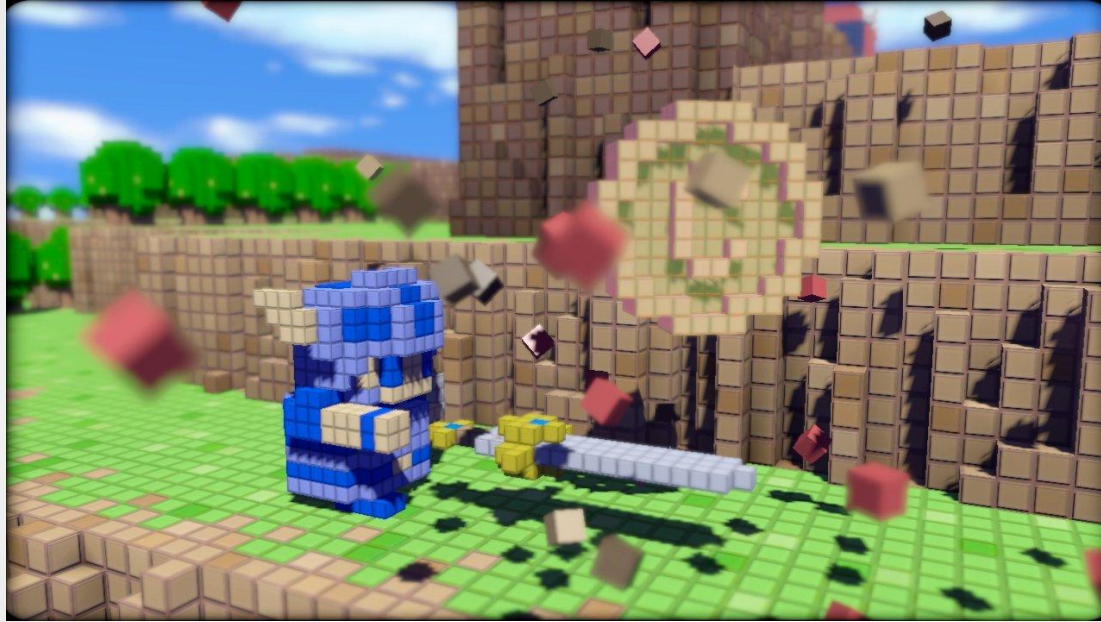
Final Fantasy Tactics (1997)

2.2 Visual History



Pokemon series (1996)

2.2 Visual History



3D Dot Game Heroes (2009)

2.2 Visual History



Minecraft (2009)

2.2 Visual History



Scott Pilgrim VS The World: The Game (2010)

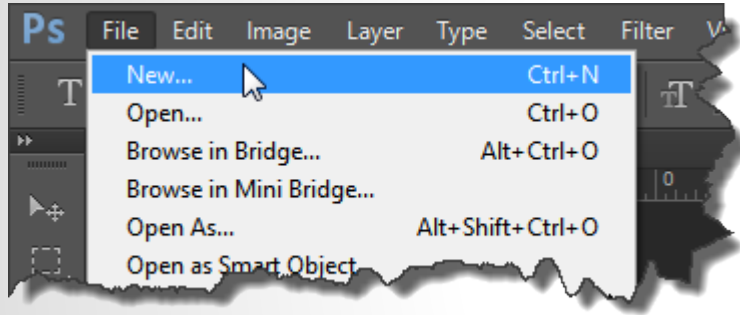
2.2 Visual History



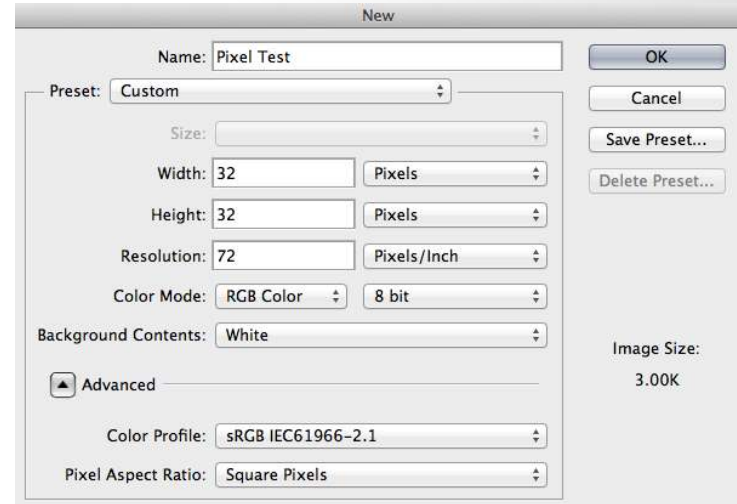
Superbrothers: Sword & Sworcery EP (2011)

3.1 Software Setup

Familiarizing with painting software: Create new file



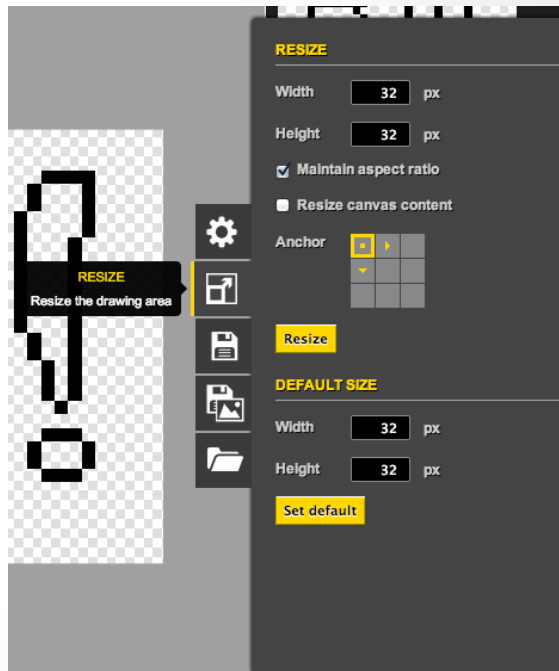
Photoshop: New File (32x32 pixels)
or **CTRL+N** (Win) / **CMD+N** (Mac)



3.1 Software Setup

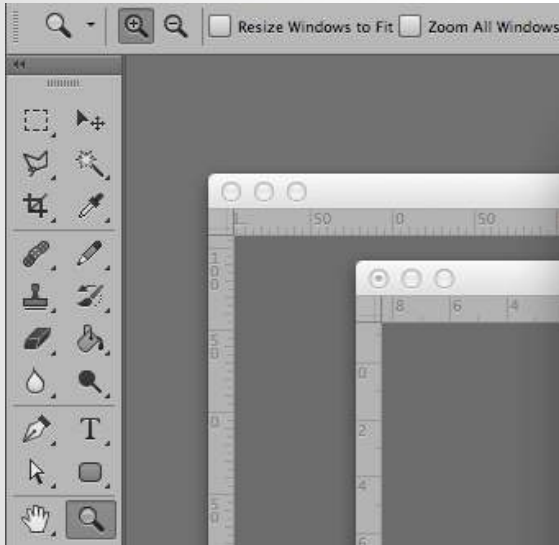
Familiarizing with painting software: Create new file

Piskel: **Resize** to 32 x 32 pixel



3.2 Software Setup

Familiarizing with painting software: *Zoom* (PS and Piskel)

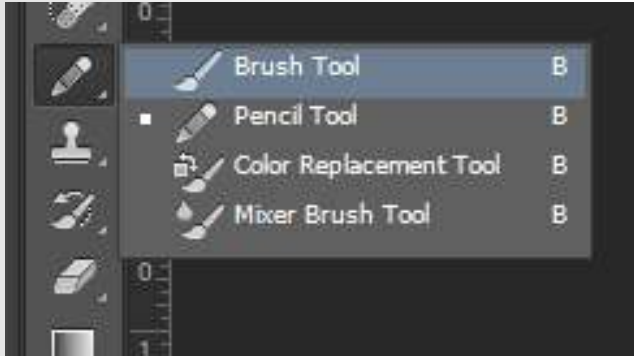


Piskel:
(+) to Zoom in
(-) to Zoom out

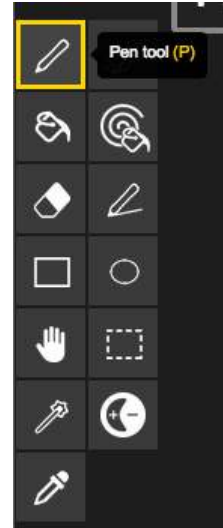
Photoshop: Zoom Tool (**Z**)
or **CTRL [CMD] + (+)** to zoom in and
CTRL [CMD] + (-) to zoom out.

3.3 Software Setup

Familiarizing with painting tools: *Pencil* (PS) / *Pen* (Piskel)



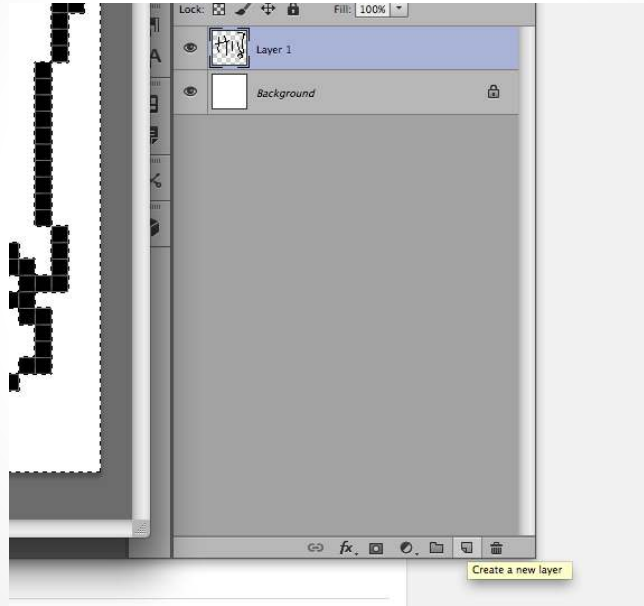
Photoshop: Pencil tool (**B** or **Shift+B** to cycle)



Piskel: Pen tool (**P**)

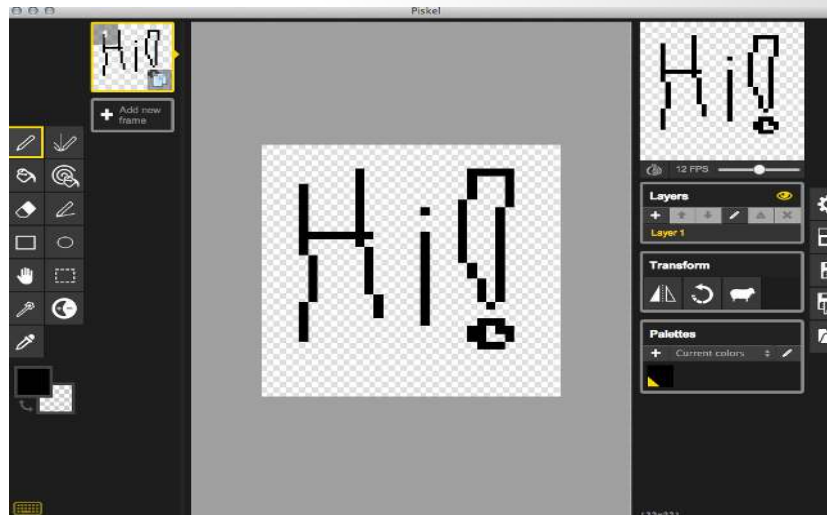
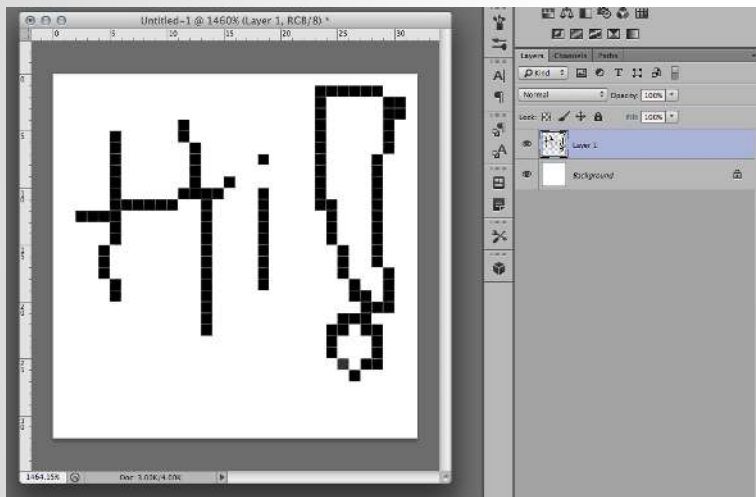
3.3 Software Setup

Familiarizing with painting tools: *Pencil* (PS) / *Pen* (Piskel)



3.3 Software Setup

Familiarizing with painting tools: *Pencil* (PS) / *Pen* (Piskel)



3.4 Software Setup

Familiarizing with painting software: *Undo*

Photoshop

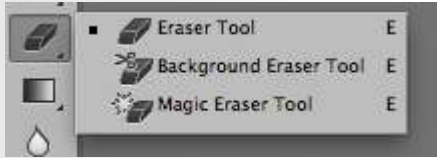
- Multiple undos: **CTRL+ALT+Z** (Win) or **CMD+ALT+Z** (Mac)

Piskel

- Multiple undos: **CTRL+Z** (Win) or **CMD+Z** (Mac)

3.5 Software Setup

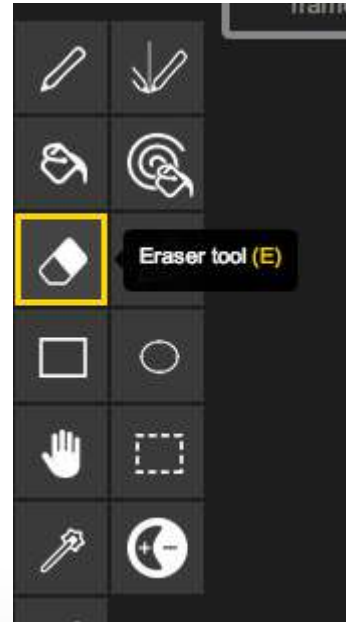
Familiarizing with painting tools: *Eraser* (PS and Piskel)



Photoshop: Eraser tool (**E** or **Shift+E** to cycle)



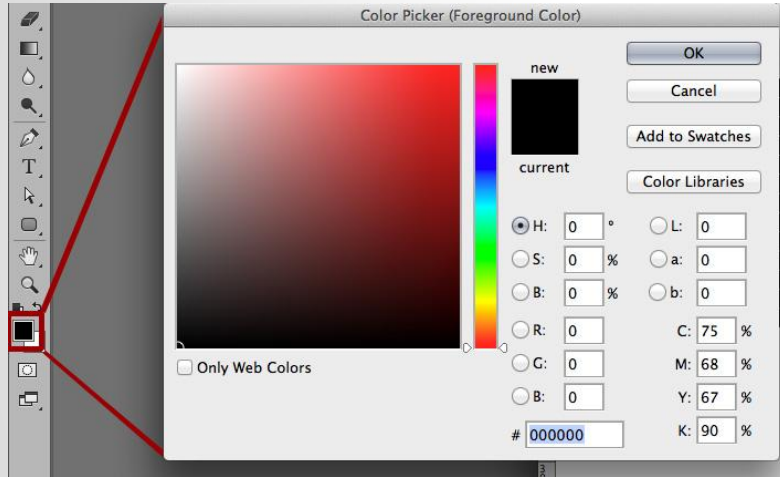
Photoshop: Mode: **PENCIL**



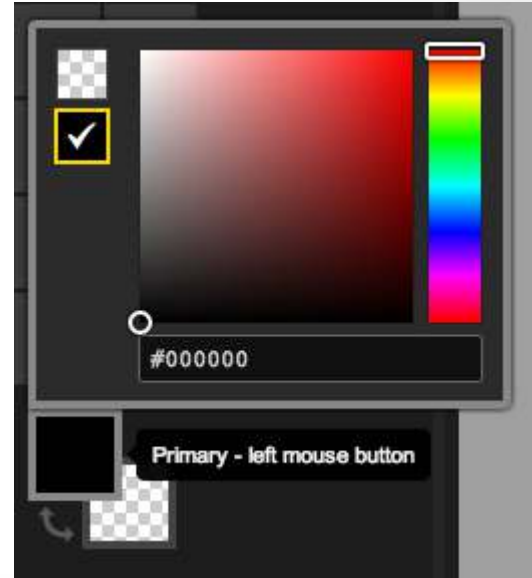
Piskel: Eraser tool (**E**)

3.6 Software Setup

Familiarizing with painting tools: *Color* (PS and Piskel)



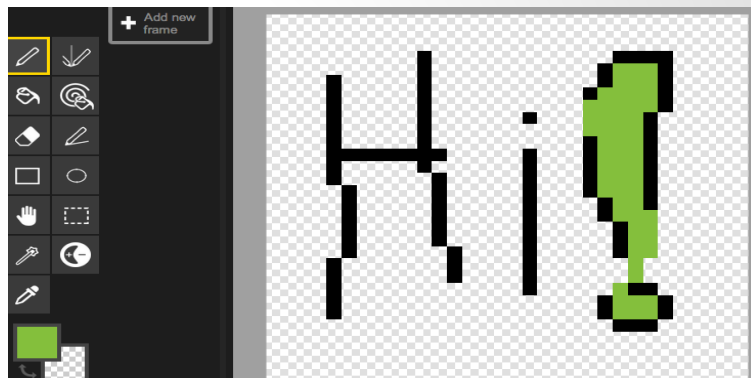
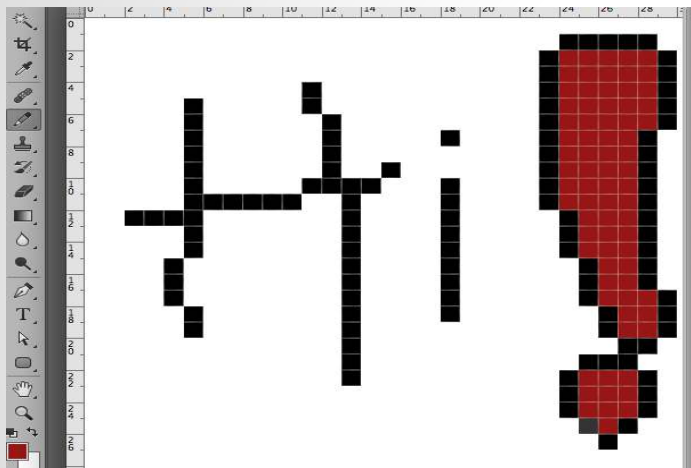
Photoshop: Color Picker
on HUE (H)



Piskel: Color

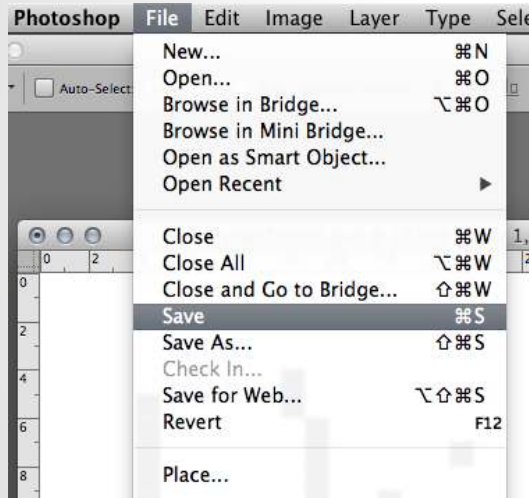
3.6 Software Setup

Familiarizing with painting tools: *Color* (PS and Piskel)



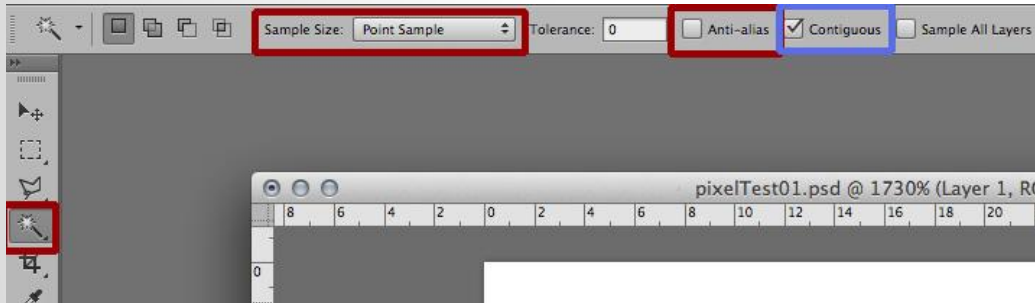
3.7 Software Setup

Familiarizing with painting software: *Saving file* (PS and Piskel)

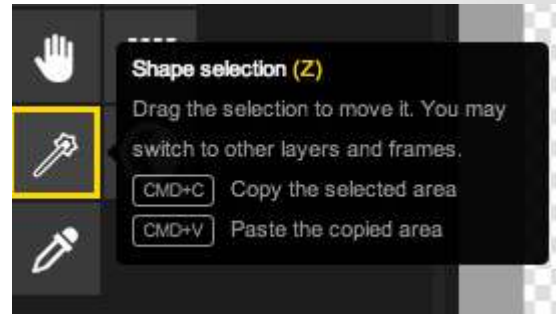


3.8 Software Setup

Familiarizing with painting tool: *Magic Wand* (PS) and *Shape selection* (Piskel)



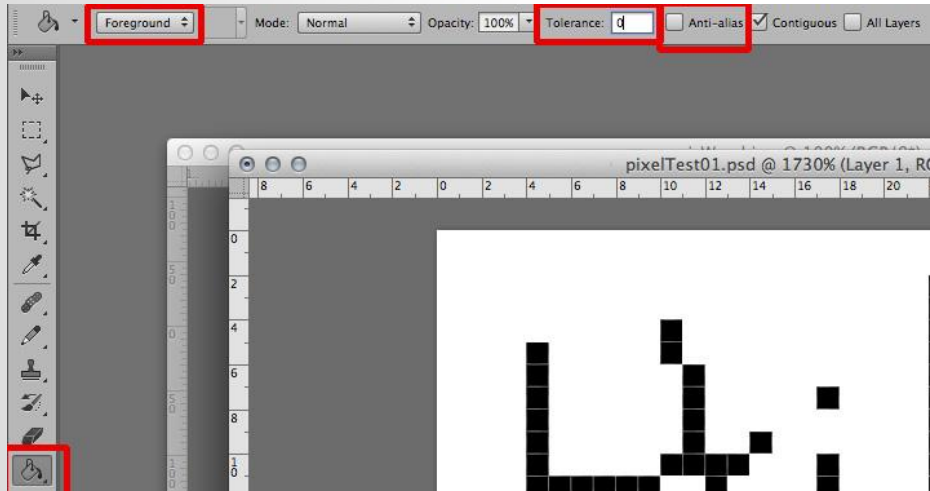
Photoshop: Magic Wand (**W**)
Sample Size: Point Sample
UNCHECK Anti-Alias
Contiguous?



Piskel: Shape
selection (**Z**)

3.9 Software Setup

Familiarizing with painting tools: *Paint Bucket* (PS and Piskel)



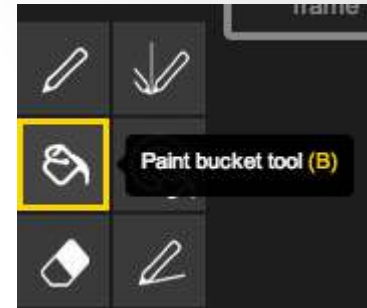
Photoshop: Magic Wand (**G** or **Shift+G** to cycle)

Fill: Foreground

Tolerance: 0

UNCHECK Anti-Alias

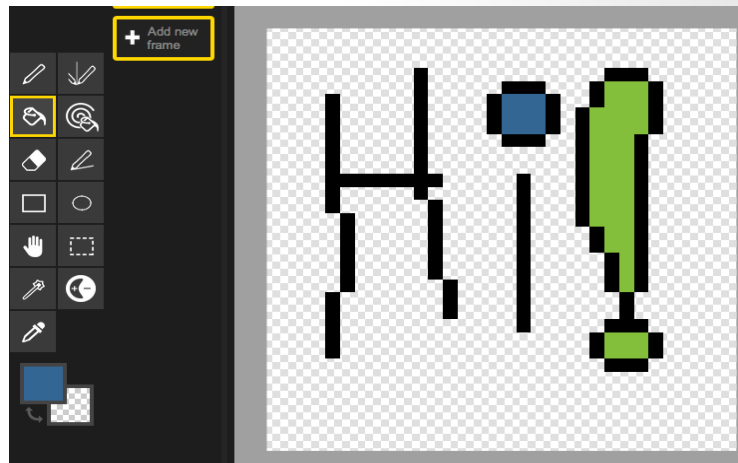
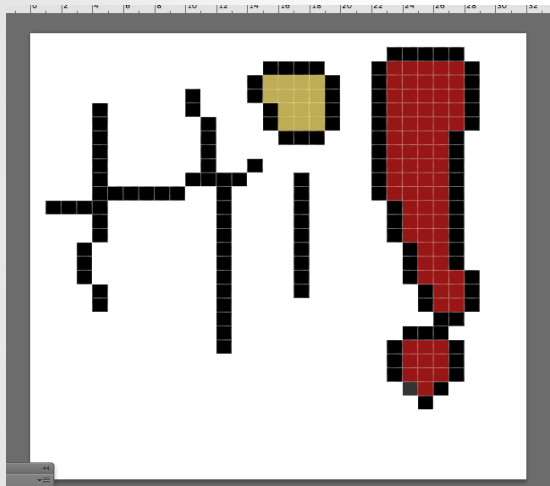
Contiguous?



Piskel: Paint Bucket
(**B**)

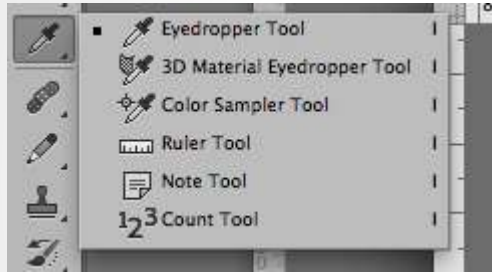
3.9 Software Setup

Familiarizing with painting tools: *Paint Bucket* (PS and Piskel)



3.10 Software Setup

Familiarizing with painting tools: *Eyedropper* (PS) and *Color picker* (Piskel)



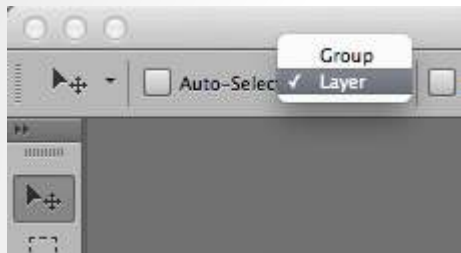
Photoshop: Eyedropper (**I** or **Shift+I** to cycle)



Piskel: Color picker (**O**)

3.11 Software Setup

Familiarizing with painting tools: *Move Tool* (PS and Piskel)



Photoshop: Move (**V**)
Auto-Select?



Piskel: Move (**M**)

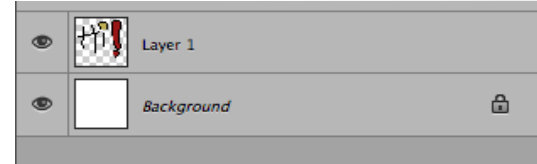
3.11 Software Setup

Familiarizing with painting tools: *Move Tool* (PS and Piskel)



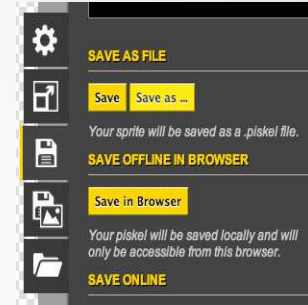
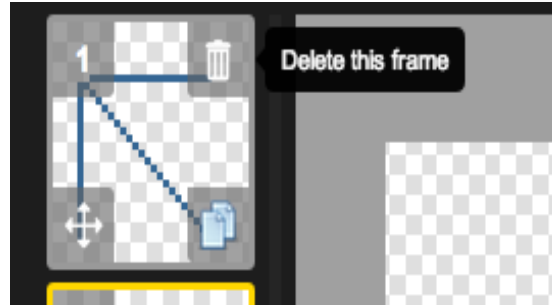
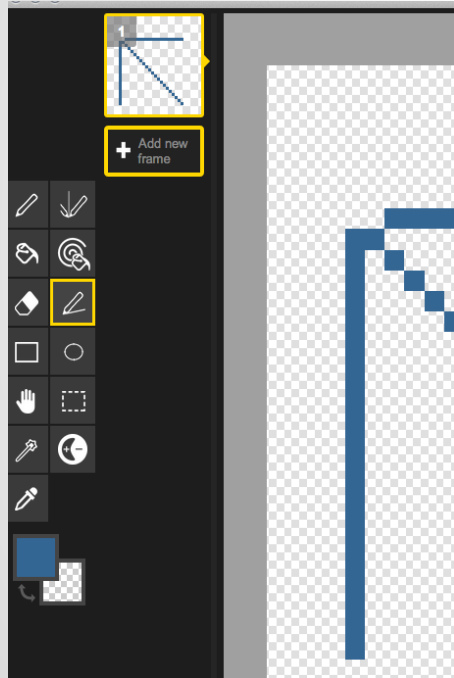
Photoshop: Move (**V**)
Make sure the layer that you want to move is selected

If
not:



4.1 *Playing with Pixels*

Create New File

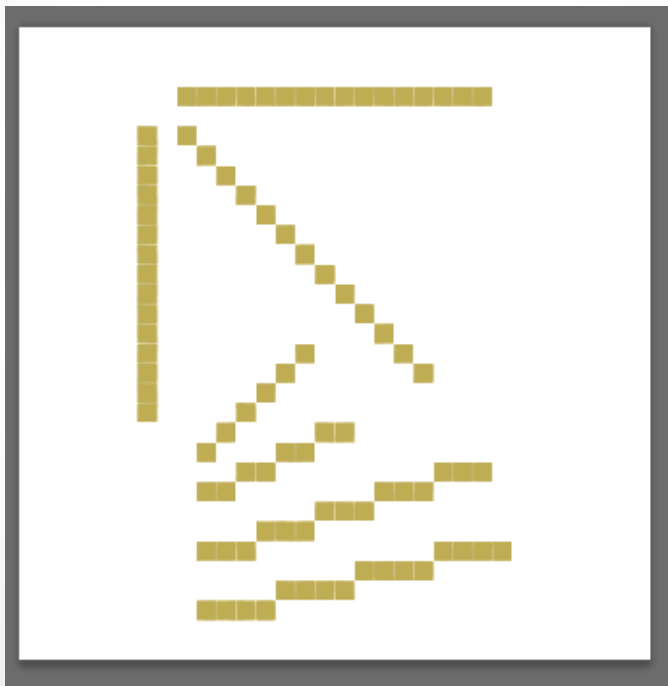


- Piskel:
- Add New Frame
 - Mouse over to old frame and Delete the frame
 - Go to Save and Save As another file name

4.2 Playing with Pixels

Creating straight lines

Photoshop: Hold
Shift+click and drag using
Pencil (Horizontal and
Vertical)

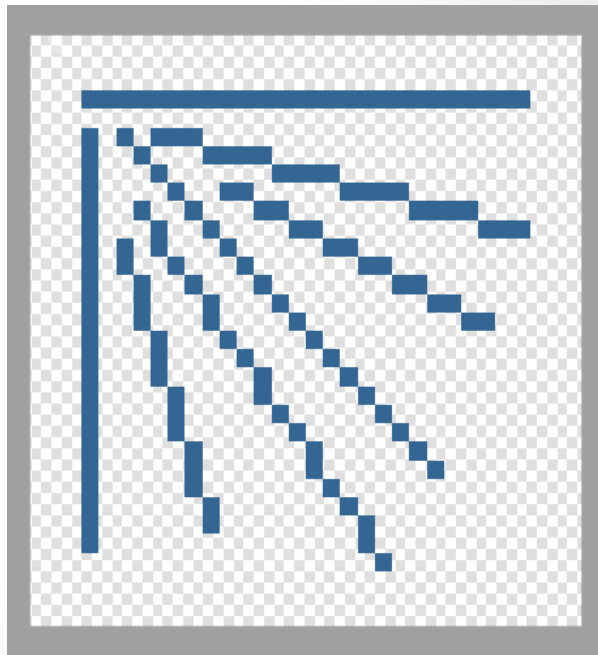


4.2 *Playing with Pixels*

Creating straight lines

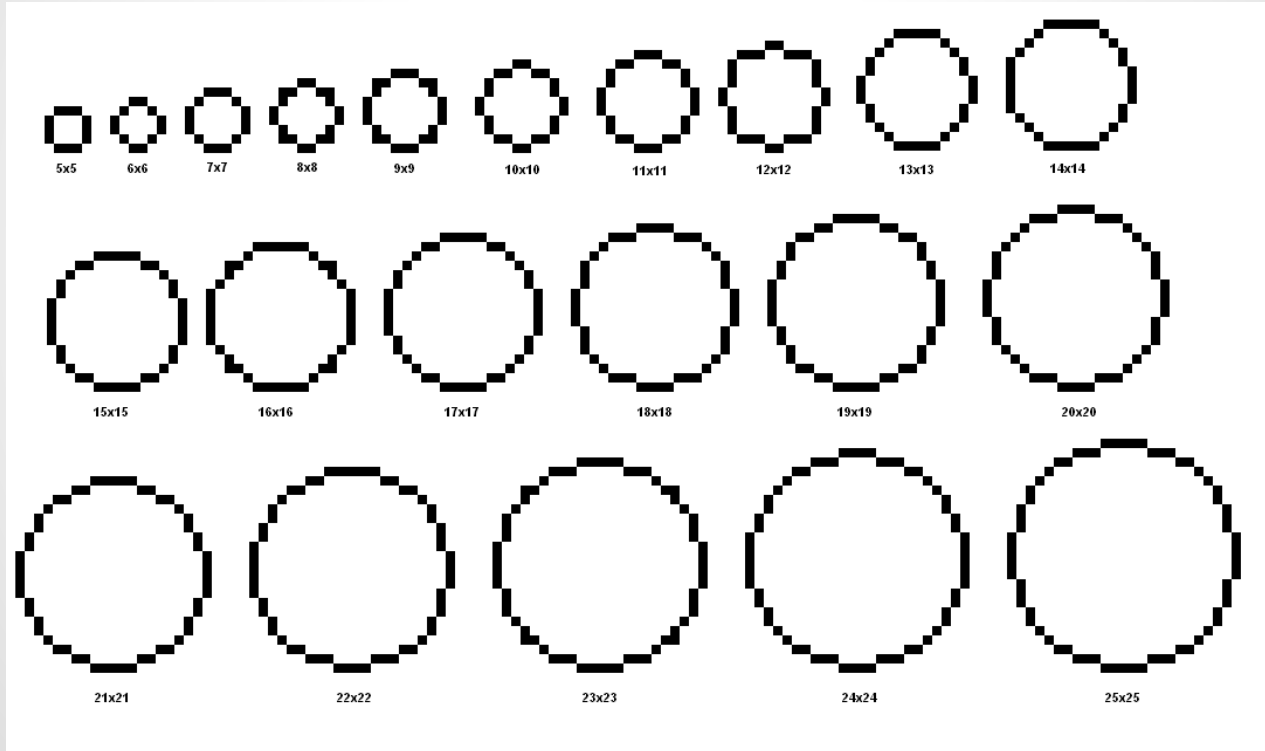
Piskel:
Click and drag the
Stroke Tool (L)

and then
SAVE FILE!



4.3 Playing with Pixels

Creating circular lines

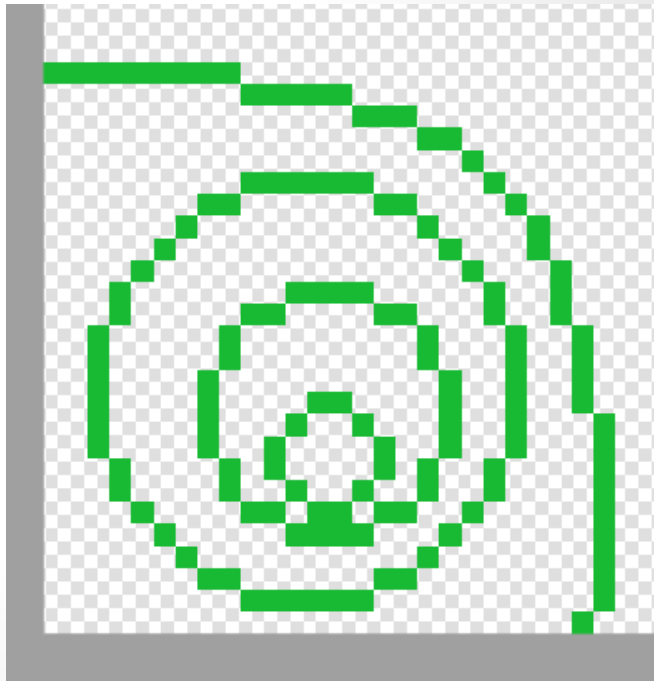


4.3 *Playing with Pixels*

Creating circular or smooth curved lines

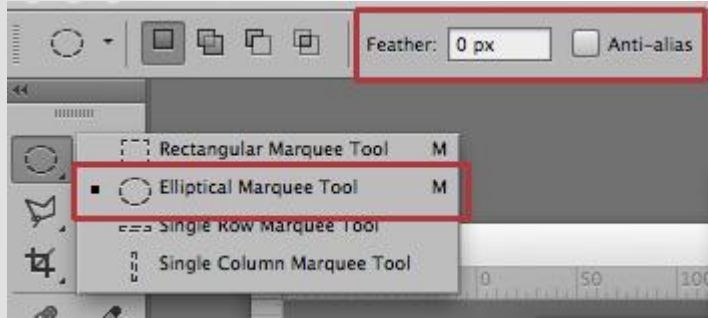


Piskel:
Circle Tool (C)
Press and hold Shift when
dragging for perfect circle



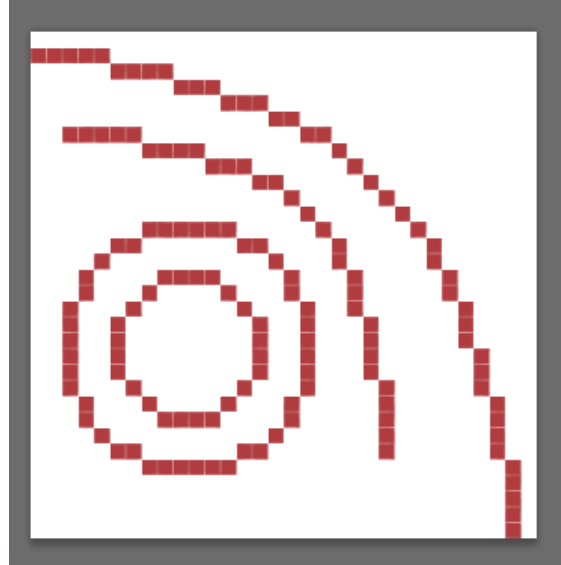
4.3 *Playing with Pixels*

Creating circular or smooth curved lines



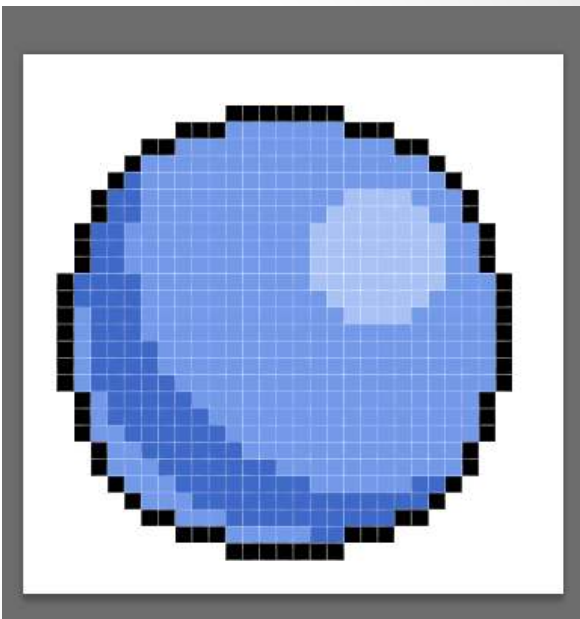
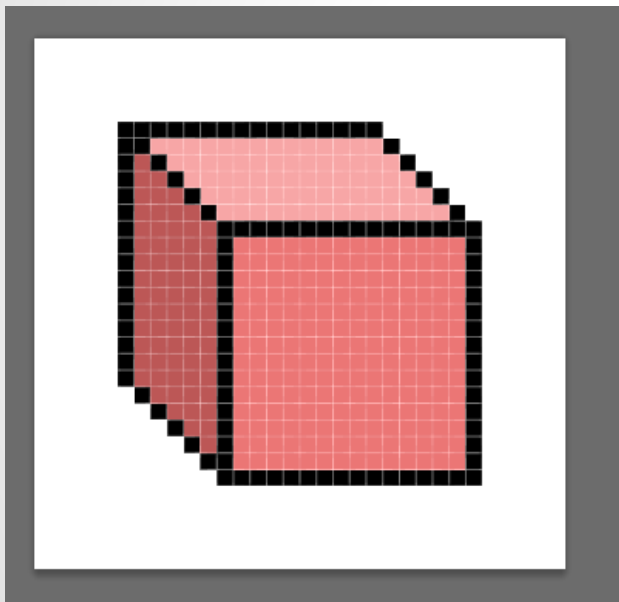
Photoshop:
Elliptical Marquee Tool
(Shift + **M** to cycle)
DEMO!

and then
SAVE FILE!



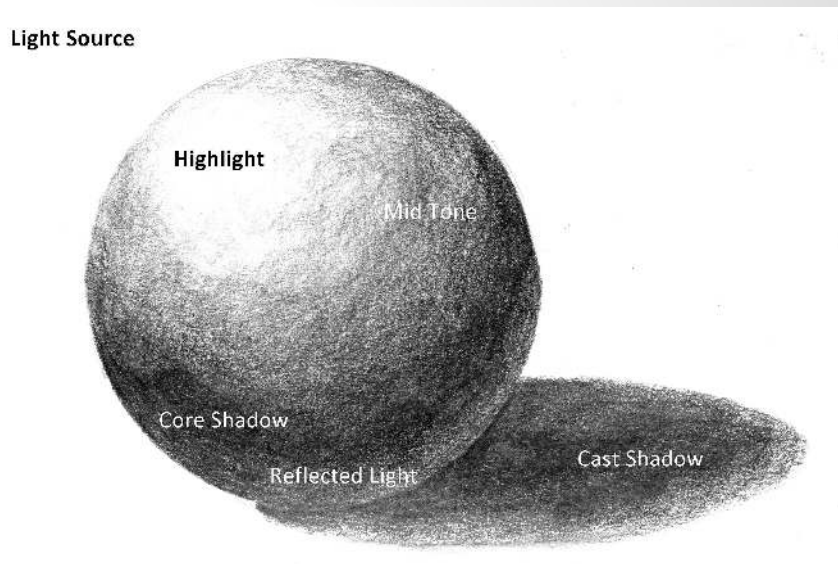
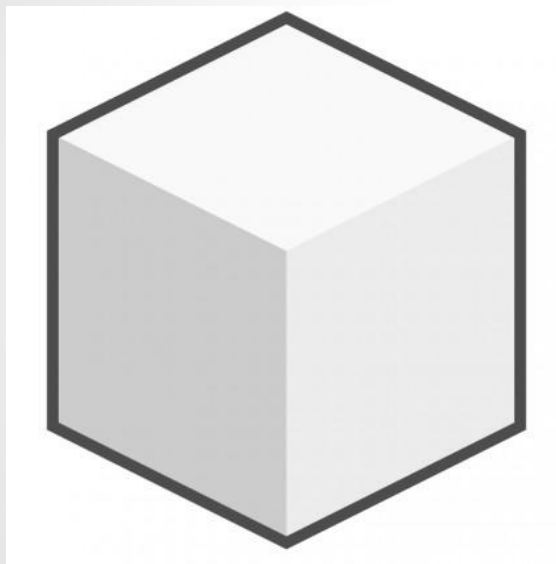
4.4 Playing with Pixels

Creating a ball and a cube



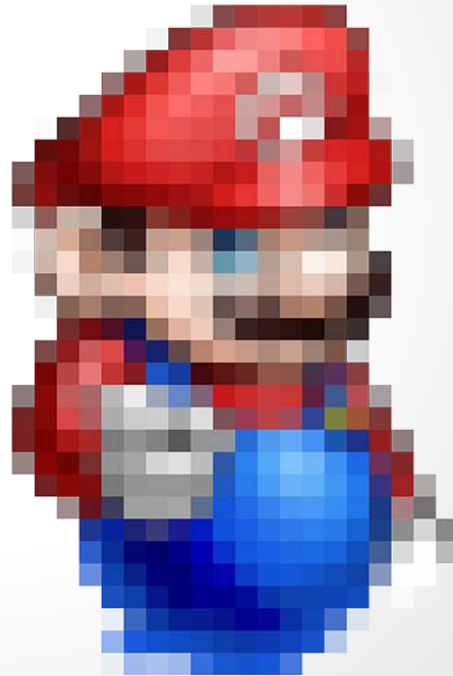
4.4 Playing with Pixels

Creating a ball and a cube



4.5 Playing with Pixels

Creating YOUR self-portrait



4.5 Playing with Pixels

Creating YOUR self-portrait



By Dale Karp



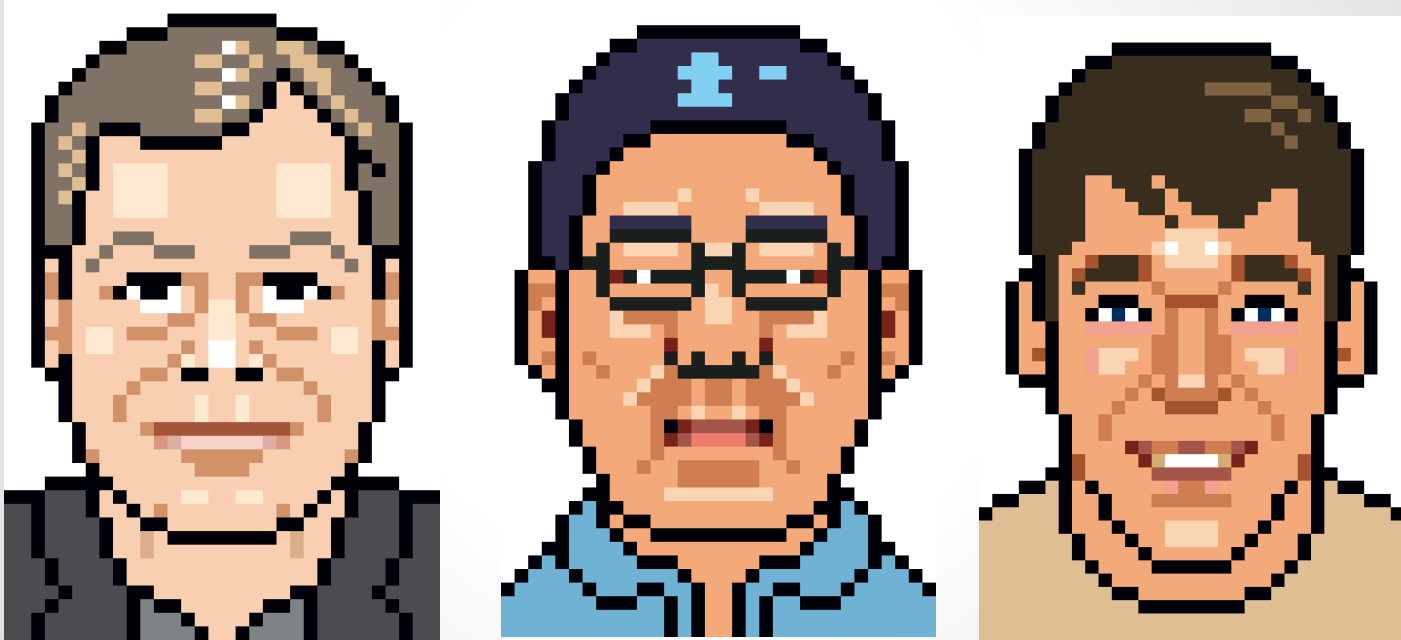
By Otanim



Found on vixels.net

4.5 Playing with Pixels

Creating YOUR self-portrait



From [2006 RPI Pixel Art lecture](#)

4.5 Playing with Pixels

Creating YOUR self-portrait



From <http://pixelfigures.tumblr.com>

4.5 Playing with Pixels

Creating YOUR self-portrait

Demo

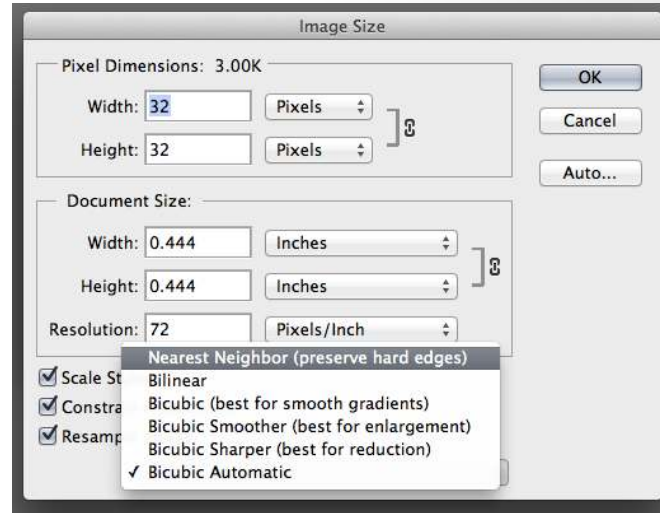
4.5 Playing with Pixels

Creating YOUR self-portrait

Do not forget to **save!**

4.6 Playing with Pixels

Enlarging the image

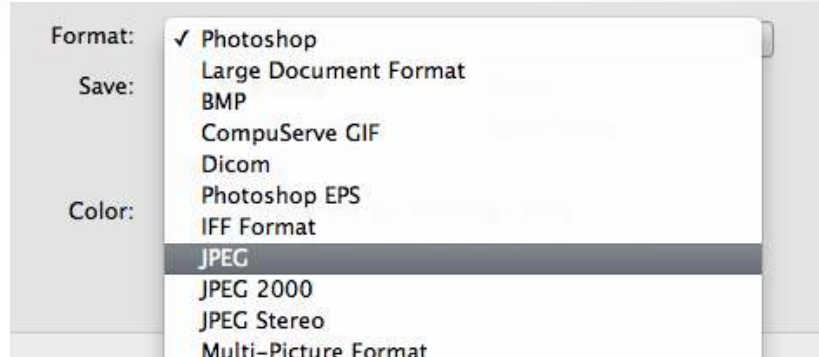
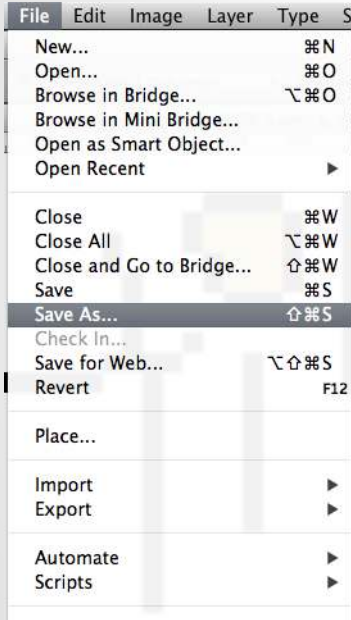


Photoshop: Image Size **CTRL+ALT+I** [WIN] or **CMD+ALT+I** [MAC]
Resample Image set to :*Nearest Neighbor (preserve hard edges)*

DEMO

4.6 Playing with Pixels

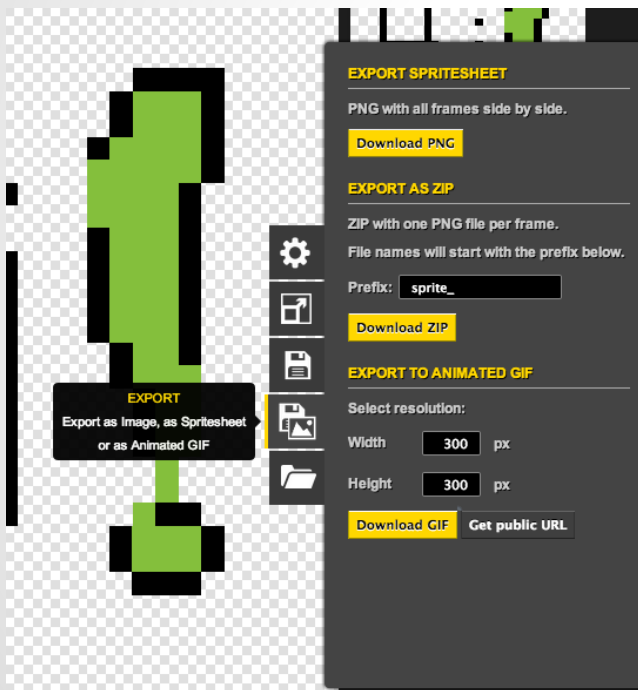
Saving the image



Photoshop: Save As **CTRL+SHIFT+S** [WIN] or **CMD+SHIFT+S** [MAC]

4.6 *Playing with Pixels*

Exporting the image on Piskel



Piskel: Export as PNG or Export as GIF

5.1 Resources

Pixel Art: 2.0 It Is (Not) Dangerous Out There. Take these!

- Pixel art documentary ([YouTube link](#))
- A writing about pixel art ([The Verge link](#))
- [Eboy](#), a famous pixel art trio
- 30 pixel art artists compiled by [CreativeBlog](#)
- A forum tutorial for pixel art at [Pixel Joint](#)
- A great tutorial by [Derek Yu](#)
- Adam Saltsman's pixel art freelance guide at [GamaSutra](#) (2009)
- One big list of tutorials, inspirations, artists, and forums at [pixelprospector.com](#)
- [Kotaku's article](#) about a Japanese pixel artist

6.1 (bonus) Q&A

Questions? Comments? Concerns? More classes like this?

The End?

Slides sharing

bit.ly/1IUacjC

Thank you for coming!

