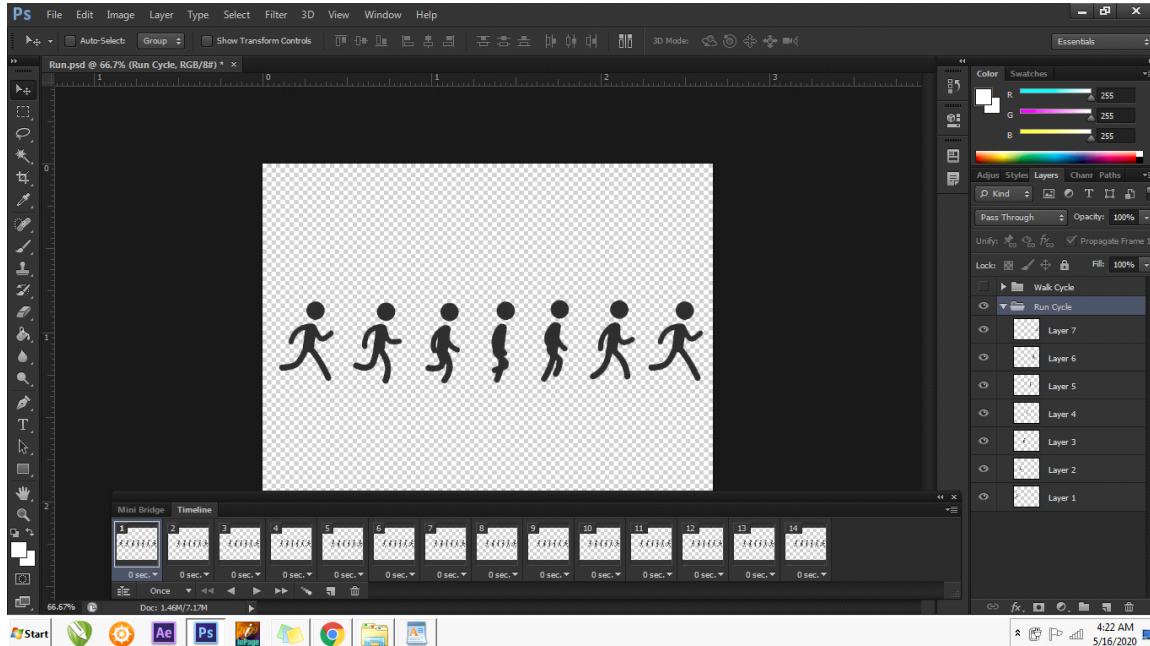


Introduction to vector base Animation

Vector animation refers to animation where the art or motion is controlled by vectors rather than pixels. It often allows cleaner, smoother animation because images are displayed and resized using mathematical values instead of stored pixel values. Before understanding the science behind vector animation, it's important to know the difference between the two major graphic types: bitmap and vector graphics.

Many of the image types people are most familiar with consist of a grid of pixels in which each pixel or bit contains information about how the color should be displayed. JPEGs, GIFs, and BMP images, for instance, are all pixel images known as raster or bitmap graphics. These bitmap graphics have a fixed resolution or a number of pixels in the grid, measured by pixels per inch (PPI). A bitmap's resolution limits the graphic's size, as it cannot be resized without losing image quality. Everyone on the internet has run into a bitmap that's been blown up until it looks blocky or pixelated.

How to create animation:

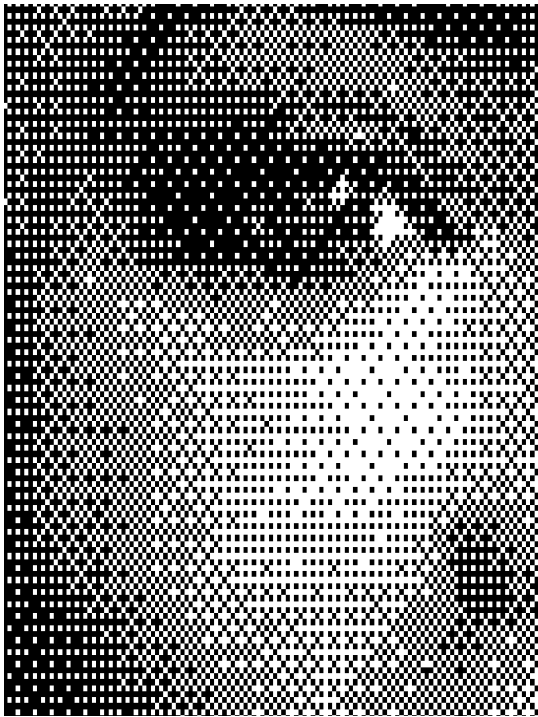


Introduction to Bitmap and Vector Graphics

Many of the image types people are most familiar with consist of a grid of pixels in which each pixel or bit contains information about how the color should be displayed. JPEGs, GIFs, and BMP images, for instance, are all pixel images known as raster or bitmap graphics. These bitmap graphics have a fixed resolution or a number of pixels in the grid, measured by pixels per inch (PPI). A bitmap's resolution limits the graphic's size, as it cannot be resized without losing image quality. Everyone on the internet has run into a bitmap that's been blown up until it looks blocky or pixelated.

Vector graphics, on the other hand, consist of paths defined by a start and endpoint. These paths can be anything from a line to a series of lines that create a shape like a square or a circle. Despite the simplistic nature of a vector's building block, paths are used to create extremely complex diagrams. Each path object carries its own mathematical statement that defines how the object should be displayed.

Bitmap



Vector



