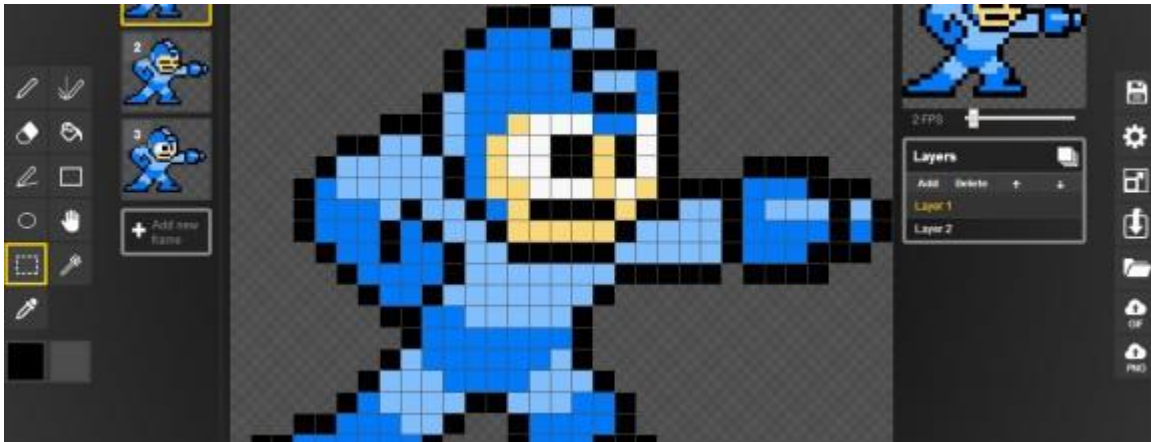


# Introduction to Pixel Art and Sprites



2D Sprites are the visual building blocks of almost all mobile games and the pixel art style that has become synonymous with video games is still a popular choice amongst game developers today. With pixel art and 2D sprites, you can quickly animate your game objects and create a dynamic viewing experience for your players. Knowing how to work with sprites and pixel art has become an essential skill for all mobile game developers.

## What are Pixel Art and Sprites?

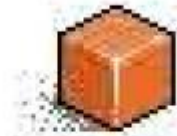
### Pixel Art

Pixel art is a digital art form where color is applied to individual pixels to create an image. The term Pixel Art was first published in 1982, although the concept had existed for at least 10 years before hand.

Pixel art is saved in file formats that use lossless data compression such as GIF or PNG format. JPEG format is not recommended as it uses lossy compression that leaves artifacts in your images.

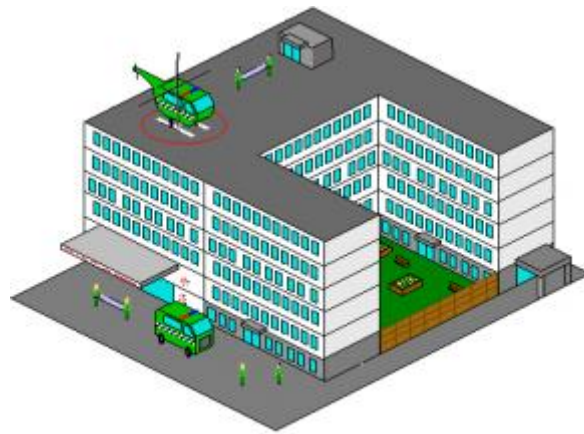


PNG

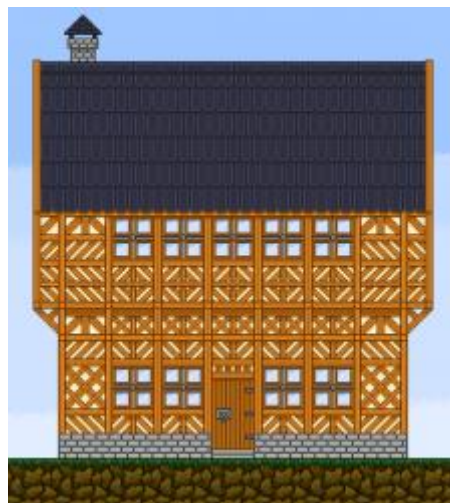


JPEG

Pixel art can be categorized into two main forms, isometric and non-isometric. Isometric pixel art has a 3-dimensional appearance even though the image is still a 2D shape.



Non-isometric pixel art presents one side of an object, such as the top or front.



## Sprites

Sprites are animations such as characters or objects that can be used in your mobile game. They can be made from any imaginable image source and animated in a number of ways. They're one of the most used visual components for mobile game development and have a long history within the game development industry.

A basic example of a sprite can be seen below:



## Why Should You Use Sprites?

### Easy Scene Creation

If you had to create every scene of your game as one image, it would make things a lot harder to edit later on. With sprites, you can add and remove visual elements as you please without having to edit any of the other visual components of your scene. This makes it easier to design complex game scenes and introduce new characters and objects for your players to interact with.

### Better Performance

Sprites also offer a performance enhancement as it places less pressure on your game to repeatedly call multiple images to appear on screen. Instead, a sprite sheet is called and then a different part of it is displayed as desired. It's much easier for your game to call an image once and display it in a multitude of ways, rather than repeatedly calling for new image sources.