

Market Research

Ashley: [BobSprite](#)

BobSprite is an online 2D sprite editor that has many good features for drawing on the digital canvas. The program has many benefits. For one, it has a good set of basic tools to use, such as pen, bucket, and eraser. The shape tool is very easy to use as you just click on the screen and drag your mouse to determine the size of the rectangle. Additionally, it has buttons at the top that allow you to zoom in and out of the pixel editor. The mouse interactions, such as dragging and clicking, are intuitive to how a regular user would utilize this program. The program also displays alerts when a user does something wrong. Additionally, the program allows users to have their custom palettes and they can pick colors from a gradient to have more control of their colors. Additionally, the program has a cool feature where while the mouse hovers over a pixel, it displays the x, y and rgb value of that pixel.

The program does have a few cons, such as the pixel size for neither the eraser nor the pen can be set. The spray can tool has an awful result. Additionally, it is not intuitive as to how to use the 'layers'. It seems these layers are a layer for an image and not a frame, and it's hard to see how a user can add a frame. Additionally, there is no preview of the sprite animation.

Alishia: [PixilArt](#):

PixilArt is an online pixel art and gif editor that provides users an extensive set of tools and features that can be used to create custom pixel art/gifs. When users first start, they are provided the option to create a new pixel art or import an existing Pixil or image that they can continue off of. If users don't know where to start, or are overwhelmed by the tools, PixilArt has a web page with a wide variety of tutorials on how to draw certain objects or create different effects that make use of the editor's features to help users feel comfortable with using them. PixilArt's tools, such as the spray can, lighten/darken tool, tile mode, frame sequence mode, palettes, stickers, and more, can be used in a variety of ways to fit the user's needs and goals. However, because there are multiple toolbars and features, users may find it difficult to navigate and understand them, and may have to log in to fully utilize some of these features.

James: <https://pyxeledit.com/>

Pyxel Edit is a pixel editing program used by 2D game developers/artists to generate maps and sprites using tileset and animation features. Users can create tiles of a desired resolution and apply transformations to them to create animations and maps quickly and easily. It has a palette feature which allows the user to pick a few colors from the beginning of a project and displays them on the screen so that it is easy to reuse colors. Multiple palettes can be defined and swapped between. Animations can be created using an intuitive frame editing interface and exported in various ways such as gifs or sprite frame sets. I think if we were to use one feature from this program, it should be the palette feature. The UI of this program is overcrowded and filled with many features, which can be confusing. We should avoid this to make the software easier to use.

Luis: <https://graphicsgale.com/us/>

GraphicsGale is freeware software that is a downloadable application for Windows systems. The UI/UX of the GG is very similar to that of MS Paint, which is a bit bare bones but still feature rich. GG also allows the user to simply move around widgets on the screen to wherever they desire, whether it's on the application window or outside. However, this UI/UX experience isn't the most intuitive and would be difficult for any user to quickly pick up. A unique feature of GG is its history mode which keeps track of all edits made onto the sprite, allowing the user to simply click on a history entry and go back to that state. GG also allows users to be able work on multiple sprites at the same time, which all have their separate frames, previews, zooms, and so on. Due to GG being similar to that of MS Paint it shares basic paint features like predefined tools (fill, shapes, pen) along with some effects that can

be applied to sprites. On the animation side, GG allows for users to play their frames either in forward, reverse, or forward-reverse sequences. Users can also select which frames to be the start or end.

Madelyn: <https://apps.lospec.com/pixel-editor>

Lospec Pixel Editor is a free online sprite editor, and it requires no downloads or account creation to use. The editor is fairly basic: the most frequently used tools (like the paintbrush and eraser) and functions have specific icons directly on the toolbar, while less frequently used features (like specific functionality involving layers) are accessed through drop-down menus. However, the undo feature does not have a specific icon on the toolbar despite how frequently used it typically is, and instead is only accessible through a drop down menu. Also, the editor does not have any kind of redo feature, which was a noticeable omission. Unique features that were positive for this editor were the drawing modes, and the ability to choose the pixel-by-pixel size of the canvas. There are two drawing modes: basic mode includes only one layer and shows the pixel grid, and advanced mode allows the use of multiple layers and does not show a pixel grid by default. Overall, Lospec is a straightforward and easy to use editor that has almost all the features that the average user would expect to be able to use.

Aimal : <https://www.aseprite.org/>

Aseprite is a paid sprite editor that has to be installed to use. The editor has all the basic functions of any other editor but keeps them organized well. Some of the key features Aseprite offers is the ability to add layers to each frame so that the user can differentiate segments of their frame. This allows for easier animations as you can copy a frame and then select the layer you want to edit and not have to worry about ruining any other layer's content. The editor also allows the user to view multiple files at the same time and easily copy/paste between them. Overall, it is designed to be user friendly, but can get pretty advanced if need be.