

## Existing Market Document

### IG.WXZ

Photoshop was known as the best graphics and photo editor, it has lots of amazing features such as smart sharpen, drawing tools, color. The advantage of the draw tools is it has many different shapes of draw tools, people can use them to draw a perfect circle or something that is more difficult, the disadvantage need to spend time to learn how to use it, because in the draw tools-box have many small tools, people need to learn before using it. The advantage of the smart sharpen is making the graph or picture more beautiful, but the disadvantage is after using it, the picture will become unreal. --XiaoChuang Huang

Pixilart is a free online sprite editor. It has most of the basic tools such as pencil, eraser, line tool and other shape tools. It has some special tools too, for example, lighten darken tool, dithering tool, resize drawing tool, etc. It also can save gif file which is a useful tool. --Mingqiu Zhang

This is an outstanding Sprite Editor project. Users are able to load frame, which is .spr files, in this project, and it could play the sprite animation cycle by using these connected frames. Users could also make changes to the frame settings, such as changing frame numbers or set restrictions to frame intervals. The most amazing feature in this project is that users are free to change the color of the sprite animation by simply change the current color to whatever they want. However, one disadvantage is that there is no such a feature to export the current project as GIF format in this project. --Pengxi Wang

Aseprite is a open source sprite editor with strong features to create animated sprites. It has a special feature of layers which can separate the drawings, a changeable color mode, wide-format of exporting options... The most interesting feature I found and is thinking to apply to our program is the Pixel-drawing algorithm, which the algorithm makes the line a lot smoother and the picture will look a lot nicer. The disadvantages are probably

that the UI is way too old, even that it might seem reasonable to look like so as a pixel editor,  
but a better-looking UI will be more applicable to modern users. --Ken Wang