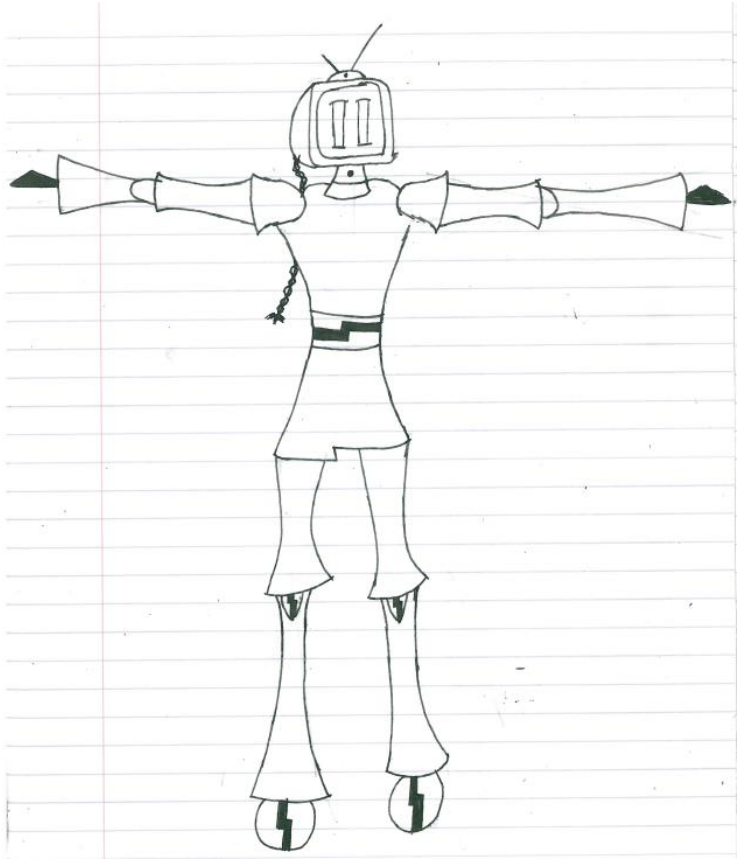
Developing the Coded Solution- Sherbet

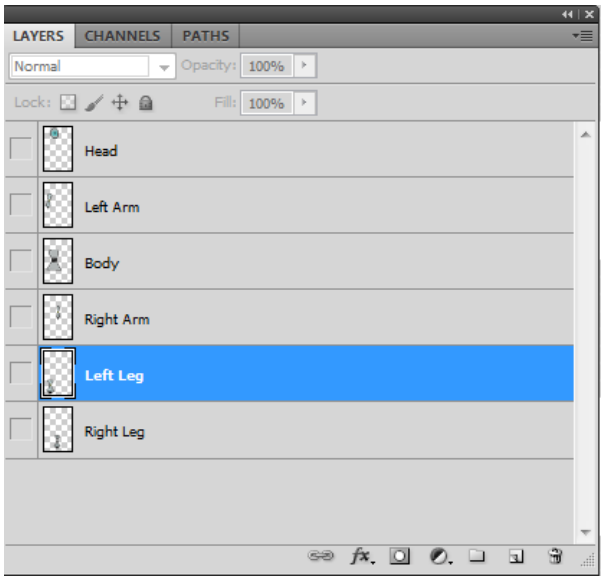
With the designs finalised, the next step would be the process of taking my drawn image and digitally reproducing it.



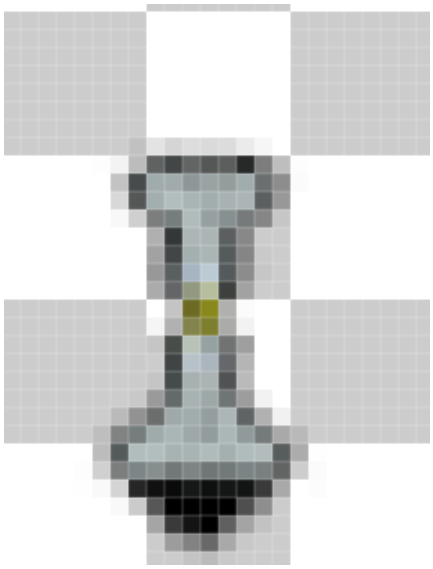
The software I chose was Adobe Photoshop. My reason for this was mostly due to experience, as I have the software downloaded at home. Photoshop also has a strong interface focusing on layers and the ability to constantly undo large chunks of work if needed.

This software allowed me to consistently edit my work to increase its quality past the point that I could without a computer.

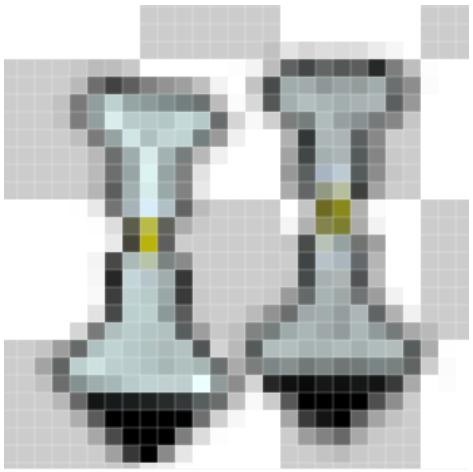
The first avatar I worked on what the currently named 'Sherbet', (an edit for 'Shebot' from auto-correct), as she would be the only character model if I cannot manage to implement a character selection.



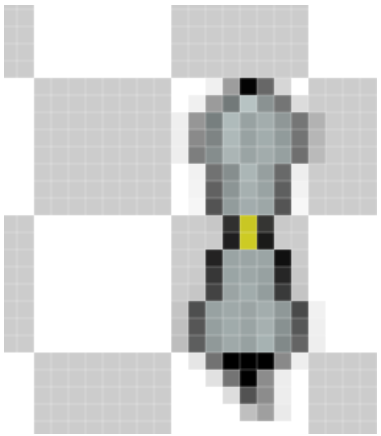
The use of layering is very important to the whole development of the robot. Not only would it allow similar body parts to be copied, it is necessary for the 'animation' of Sherbet moving.



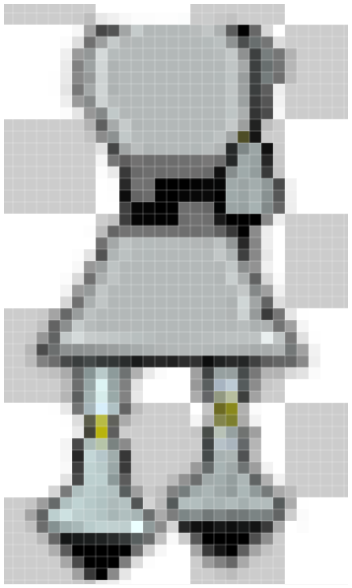
Sherbet was produced from the legs up, the first leg was a block that had parts erased from it, rather than being drawn. (Please note that the layered image is from a file after it had been moved, and will be blurry when compared to the final still of Sherbet)



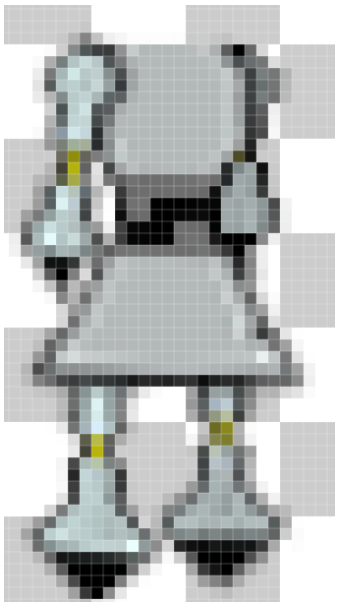
While the next leg looks like a copy, it was actually drawn separately, as it is actually longer than the right leg and lighter to give the impression of being side on.



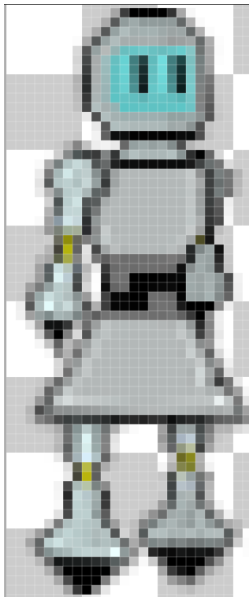
The arms were developed in the same way as the legs. The gold was used in place of the ball joints as the final product is too small to see that detail.



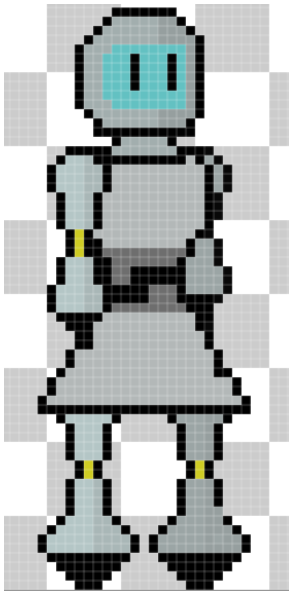
Next the body was added, it is important to make sure that it is added as this layer as the next two go above it.



The next arm is added, once again it is longer and lighter than the first. It is also a layer above the body. This gives it the appearance of being side on.



Finally, the head is added. Due to limits on size, the modem had to be lost. The cord hair has also been left out, but may be edited in later models.



When The static model was saved as a PNG, it was much cleaner as the separate parts hadn't been rotated yet.

As I was afraid of losing detail via scaling, I decided to work in real size, that being the size it appear on screen. This meant that I was forced to use pixel art as the size of the character on screen 40x64 pixels:

 This size is important, as there is an invisible bounding box around the avatar for collision detection. This was another reason for working in real size.

The file itself was saved as a PNG as it is a better alternative than GIF or JPG for high colour lossless images and supports translucency. This decision comes at the cost of no support for animation, but as the movement animations for Sherbet are not complex, I can make multiple frames.