

### **Status report 1:**

#### **What was done?**

- Researched discrete and fast Fourier transforms (DFT and FFT)
- Began planning a frequency analyser and visualiser which would use OpenGL and the Cooley-Tukey FFT algorithm to process frequencies and display a pretty graph
- Researched the type of audio input that would be ideal for performing a Fourier transform
- Learned how to open and play a WAV file and load the contained PCM audio into a buffer
- Began researching text compression algorithms as an alternative project idea

#### **What got in the way?**

- The mathematics were far too complicated and went right over my head
- The scope of the project was overwhelming
- Determining how to actually implement the FFT algorithm, and what the required inputs for the function should be

#### **What is planned for the following week?**

- I've abandoned the FFT project, and I plan on switching gears to text compression
- I plan on researching different text compression algorithms and starting over my documentation and planning