

# AAVP Final Project

For my final project I decided to build upon one of the 4 small courseworks I had made earlier. This one being the fftSynthesiser. Many of the concepts in the code were inspired both from a project I had made last year (as mentioned in the small coursework) and by a playlist of openFrameworks tutorials[1] that cover some of the concepts that I had utilized.

I expanded on this by making the simple synthesiser into a more complex interesting one. I did this by implementing OOP, creating classes that generate envelopes and filters. Using these classes I was able to generate more detailed and aesthetically pleasing waveforms, without having to make many changes to the code of the visual aspect of the project. Seeing as this project was larger in scope than it's predecessor it also made sense to add more user interaction options. This was both in the various keys detailed in the on screen instructions and adding more parameters to the GUI panel.

Overall I'm happy with how this project turned out. I believe I was able to effectively combine both the audio and visual sides of creative computing to create a project which both looks good and can be used as a teaching tool. With more time I would have added more envelopes and filters to create a bigger array of waveforms and subsequent FFT frequencies.

## References

[1] *openFrameworks Audio Programming Tutorials* - Youtube, [youtube.com](https://www.youtube.com/watch?v=QX4ZdlsqSQ&list=PLNURizt7mHsJ9EasyqZJI7M3e-kAOV9Pa), 17/10/2016 - <https://www.youtube.com/watch?v=QX4ZdlsqSQ&list=PLNURizt7mHsJ9EasyqZJI7M3e-kAOV9Pa>