Evaluation:

Changes made during Project:

Ive branched off from my initial plans somewhat when it comes to the sensors that I've chosen to use. initially in my design proposal I had planned on making use of 8 ultrasonic sensors and multiple face sensing resistors control the sonic environment. Whilst investigating ways to realise this plan, I discovered that if I were to use this many ultrasonic sensors, then I would not have very many digital inputs remaining to use on my Arduino chip in order to trigger samples effectively. Due to the nature of the ultrasonic sensors I also deemed that they would be an inefficient means of triggering samples to begin with anyway as the reading that can be picked up by them tend to fluctuate greatly and would therefore be difficult to map and assign specific samples to them. Therefore I feel my plan to opt for the much more simplistic but also much more practical push button switches seems to have worked out for the best.

Also included in the original proposal was the plan of amplifying the project using a surround setup of speakers inside the box. I quickly deemed this as being impractical as I believed the speakers, enclosed in that kind of a small space, would not provide much more of an enhancement to the sonic field than a stereo pair of headphones already offered. The inclusion of a surround setup would have also required a much longer mixing process and much more attention being placed on the sound localisation aspects of the programming.

Conclusion:

Overall I am really pleased with the final outcome of my sound enclosure. I feel that the build went extremely well and that the finished product was totally public friendly and robust enough to be tested extensively. One thing that I was disappointed with was probably the functionality of the force sensing resistors. I noticed throughout my testing that the readings achieved from them on separate occasions varied slightly and this required a a calibration period before every setup. I believe this may be due to the nature of the homemade force sensing resistors and if I wished to abolish this process I would simply just have to purchase professionally manufactured force sensing resistors instead.

Another area I feel I could have been planned better was the use of the headphones. Although they worked fine, I feel that having a wire dangling down in front of ones face can really distract the user and take away from the immersive experience. If I were to elaborate on this project I would probably look into using either wireless headphones or else some kind of an elegant speaker system that would fit in well to the enclosure.

I feel that this product has a lot of potential to be developed further as it can be used not only for a single performance but almost like a console or sound system. I'd like to imagine this system being of interest to the visually impaired as a substitute for video games. Whilst working on the presets and coming up with ideas for them I've realised that the applications for this box are only limited to the imagination of the person designing the environments. This project provides a framework for a new compositional medium that I would welcome others to come and try sampling their own projects on.