

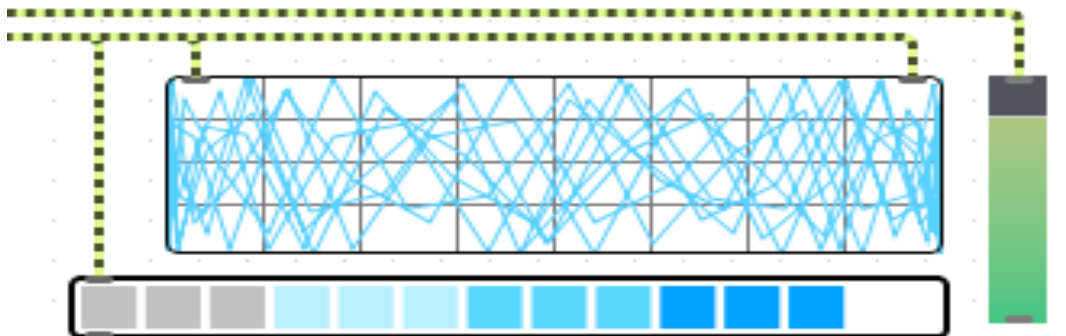
SOUND DESIGN & SONIFICATION

2010 ASSIGNMENT 2 DECO 1013

Audio Signal Processing for Data Sonification

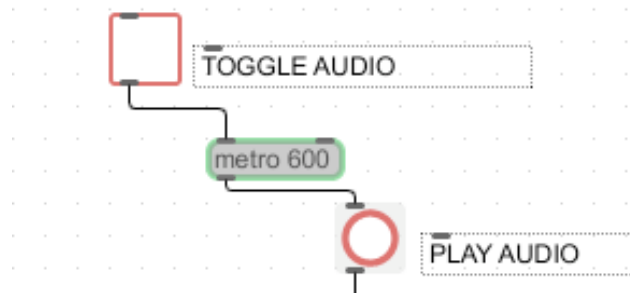
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The sonification system that I have developed is an auditory interpretation of data from research on 'World Population Growth'. The statistics that I have used were researched by the *New York Times* and were first published June 14, 2010 and can be found at '<http://geography.about.com/od/obtainpopulationdata/a/worldpopulation.html>'. They cover the growth of the worlds population from 0 A.D to now and also give predictions of future growth to the year 2050. The figures given in the table increase at varying intervals through to the 1950's for convenience resulting in a rapid increase in pitch for the first part of the audio output. I thought that these statistics would be an interesting and relevant topic for this assignment because population growth is an important issue for the planets future and therefore our future.



The purpose of this sonification system is to clearly show, through audio, the disproportional growth of the worlds' population over time. This can be clearly heard by comparing the steady increase of yearly increments to the exponentially increasing pitch of the population. To add to the audible representation of the increase in population that is taking place I have also added a signal oscilloscope in the form of a 'scope' graph. To this I have added a meter and live meter to aid with the visual representation of the audio (above). To give a clear impression to

the listener at a reasonable rate of increase I have set the metronome to 600(below).



I have also had to reduce the value of population that ranges from the hundreds of millions to billions to a decimal value so that it is within the audible range. After adding the results of the statistics regarding the increasing population of the world over time to my sonification system it has made me more aware of populations impact on the planet and how rapidly we have multiplied over the last 2000 years.

