# CS2310 Project Milestone #2

**by Guy Gadola**

**Title: *Low-Frequency Noise Manager***

**Planned Milestone 2:**

1. A system that uses the "Developer's SIS Testbed to select and fine-tune its algorithm" to identify one or more low-frequency sounds (**Fig. 1**)
2. An ontology *not necessarily* written in the OWL language that describes a subset of
    a. Noise sources
    b. Noise ordinances
    c. Noise mitigation techniques

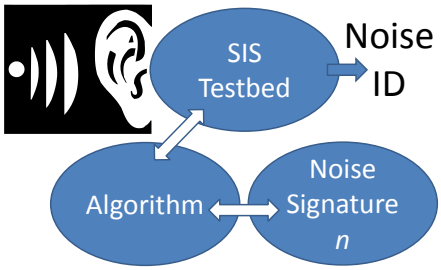


Figure 1

**What Was Achieved and How:**

Original Sound (Outdoor) ➔ Low Pass Filter ➔ Low-Frequency Sound (Indoor)

↓ JAudio ↓ XML

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Figure 2

1. A small ontology describing one truck and two train events consisting of XML files. To create the XML files, I downloaded royalty-free .wav files [1] of outdoor sounds. I ran those .wav files through Audacity's low pass filter, which was set at 250 Hz, to simulate how those outdoor sounds would be heard indoors. The original and filtered noises were passed to JAudio to extract their characteristics, which JAudio then wrote as XML (Fig. 2).
2. A started SIS Testbed Project that is very simple. Code has been added to two templates to either match the number in green (Fig. 2) exactly or within a *range*. (At the time of this writing, I am having trouble sending message 601 to test the code.)

[1] http://www.freesound.org/