Modulo7 Status Report : Progress of Master's Essay

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Code and Design Level Progress

1. Implemented basic similarity measures and vector space models for polyphonic and Monophonic Music. These vector space models are based on expressions of pitch, melodic contour, tonal histograms etc.

2. Implemented basic statistics (features that you can extract from a song). This includes concepts like interval indices (an expression of overall mood.), longest repeating melodic fraction etc (denoting a sense of complexity of the song).

3. Completed indexing on basic attributes like key, scale polyphony.

4. Implemented basic text IR analogues for similarity. (edit distance of melodies etc)

5. Completed a basic set of queries and big part of the modulo7 base querying system.

6. Currently working on advanced similarity measures on contour and implementing a multithreaded database engine and indexer.

Experimental Progress

1. Acquisition of ground truth results for melodic similarity are delayed as many datasets are proprietary.

2. Indexing tested on the SAAD dataset. Basic queries are sanity tested.

3. Custom query testing for basic cases is halfway done (queries like select midi work)

4. I tried to run the indexer on top of the million song dataset. I ran into memory issues. Will investigate further and if required need your help with permissions for the same.