

Team 5 Project Charter

Dynamic Musical Generative Composer

Ben Ahlbrand
Chris Doak
Sean Phillips
Jacob Richwine

Problem Statement:

In the current music creation software landscape there is a lack of software that dynamically generates music based on the user's input and musical ideas. There is an overabundance of composition software, but lack of user-friendly computer assisted generative tools. This software would be different in the fact that it could take pre-existing motifs and produce entirely unique patterns, ideas, and riffs that compliment the user's musical input, and allow for manual manipulation of generated output with a graphical user interface.

Project Objectives:

- Read input through MIDI or manual interface
- Generate complementary musical phrases
- Optional harmonic parameterizations to guide the suggestion of richer tones
- Give the user common musical suggestions to make the musical piece flow
- Intuitively connecting phrases together in a simple drag/drop interface
- Provide users with a complementary tool for harnessing musical capabilities
- Allow user to combine creation and save composition

Stakeholders:

- The developers of the software
- Hobbyist Musicians/Composers

Project Deliverables:

- Application backbone for harmonics
- Generative musical patterns
- Changeable parameters to alter musical generation
- Cross-platform Java GUI desktop application for user input