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# Making Music using the Circle of Fifths

A project of the Foothill College CogSci club  
2018 winter

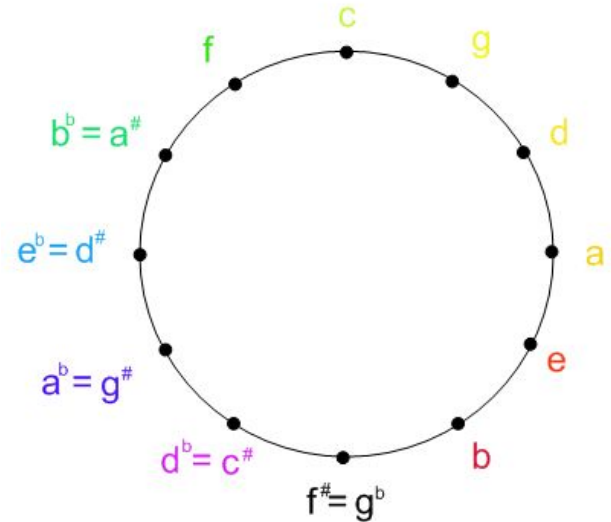
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# Abstract

The *Circle of Fifths* is a tool that helps musicians create harmonious tunes comprising of chords that sound pleasant together

Using the Circle of Fifths, we develop a tool that helps the user:

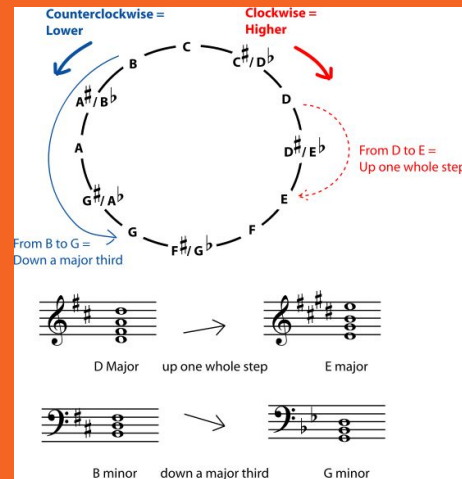
- understand key signatures, scales, modes etc.
- transpose music to a different key
- identify and link musical patterns



# Problem Statement

## Why (i.e. our motivation..)

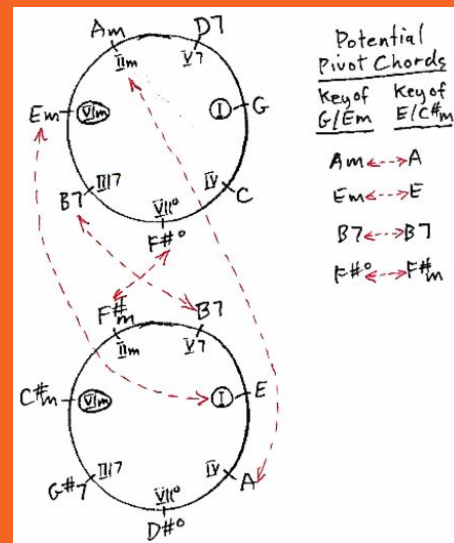
- Harmonious music = pleasant notes combined. But some questions ...
- What notes and chords sound pleasant together?
- When we find the right chords, why is it "right"?



# Problem Statement

## What (is our vision?)

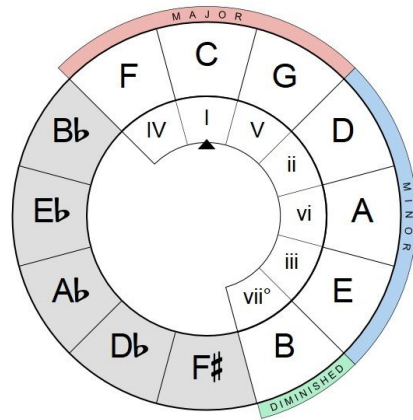
- We want to create a simple tool that helps musicians compose and/or arrange music.



# Problem Statement

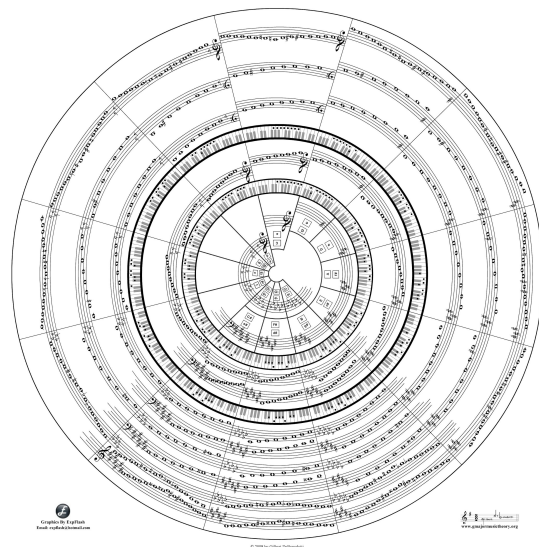
## How (i.e. our tool will..)

- Identify & visually represent musical patterns from user input (notes, scales, etc.)
- Recommend chords, chord progressions, other techniques etc.



# Solution

- A program - our initial prototype - that interacts with the user to generate MIDI files.
- Prototype demonstrates the creation of a MIDI file that plays a known (as opposed to programmatically discovered) tune.
- Inputs to the program are music notes, time signatures and scale degrees.



# — Conclusion

- The principles of music composition and arrangement are represented visually in the *Circle of Fifths*.
- Using the fundamentals underlying the Circle of Fifths, our tool enables a musician to identify musical patterns that sound great together.
- By recommending ideal musical patterns, the tool offers the user various ways to compose and/or arrange a piece of music.



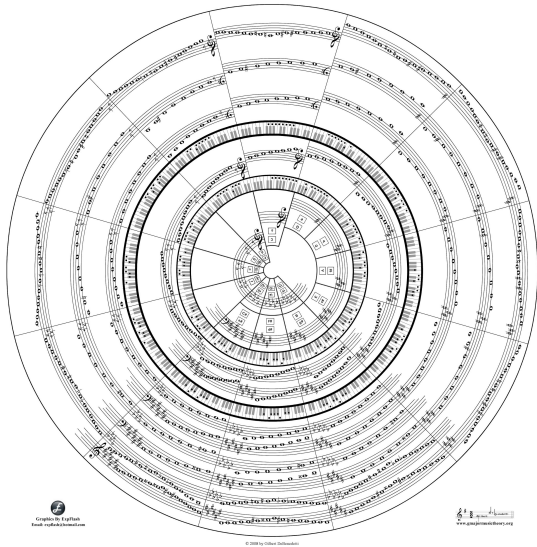
Questions?

# Our team



*Credits: Prof K., references tbd*





Thank you.