

Hummi-Com: Humming-based Music Composition System

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*Wanna be a musician?
Hummi-Com enhances
your melody creation skill!*

Purpose

To provide a way for non-professional users to easily compose original songs by humming

Background

User-generated content (UGC) has become popular

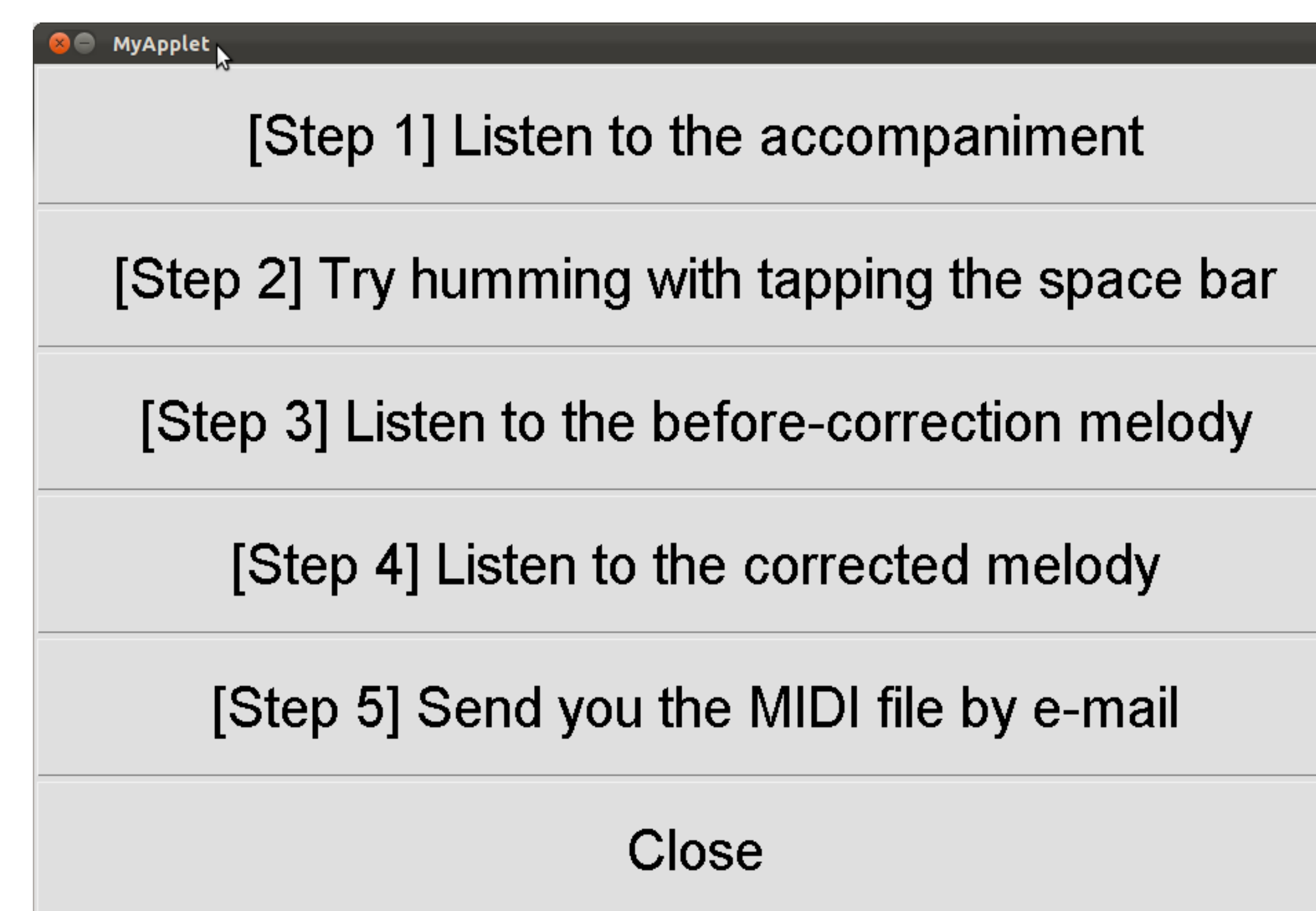
Why humming?

Everyone can use humming.
No specialist knowledge is necessary.

Issues and solutions

- 1) **Unclear note boundaries** → Use **tapping** for inputting note boundaries
- 2) **Inaccurate pitches** → **Correct pitches** based on music theory

Let's try Hummi-Com



First, listen to the accompaniment, and imagine a melody

Then, **hum your melody** listening to the accompaniment by headphone.

Tap the space bar at each note boundary

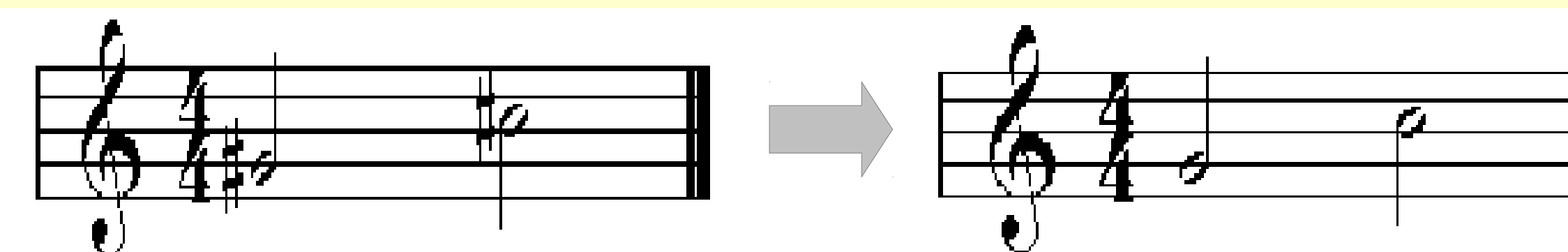
Take home your work if you like

Difficulty in designing note correction rules

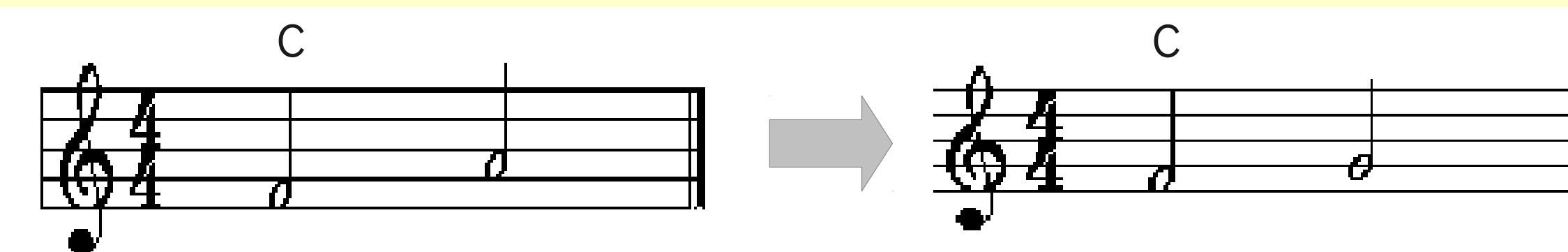
Trade-off between removing dissonant notes and retaining musically acceptable notes

Overview of note correction rules

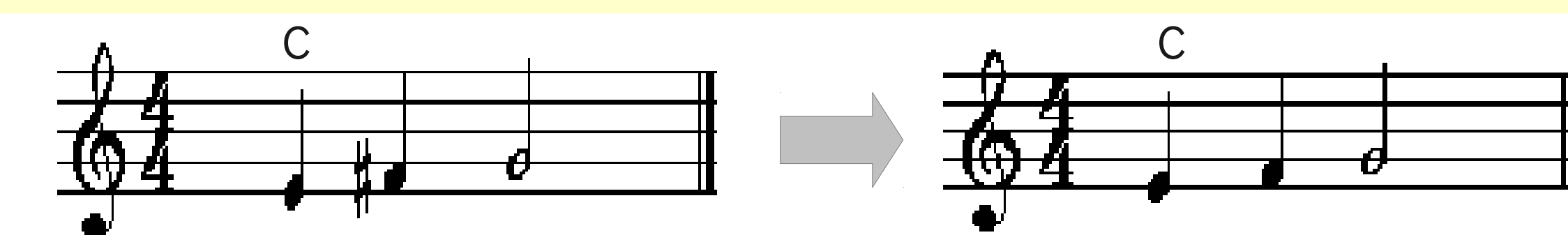
1) Diatonic rule



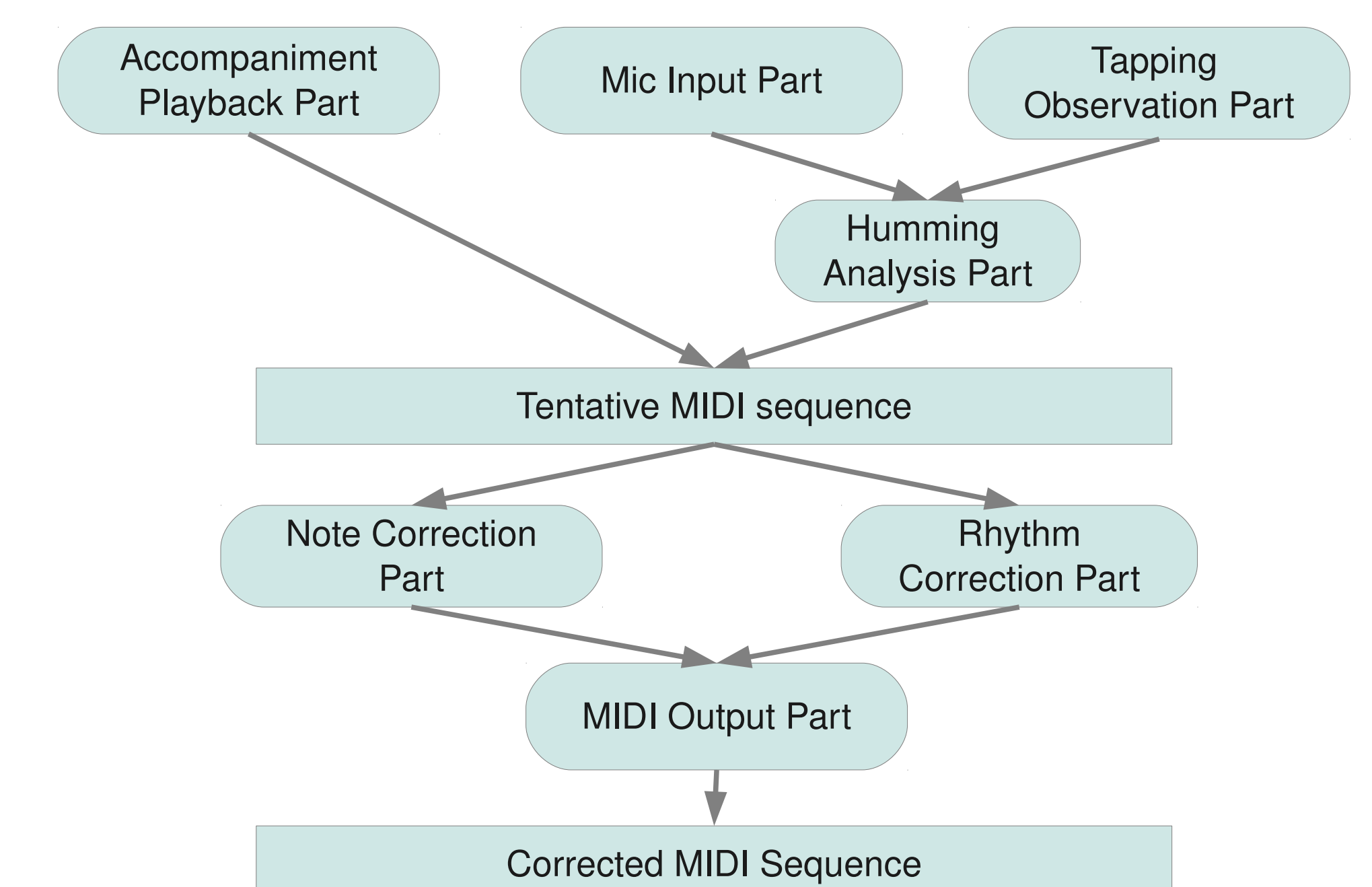
2-1) Appoggiatura rule



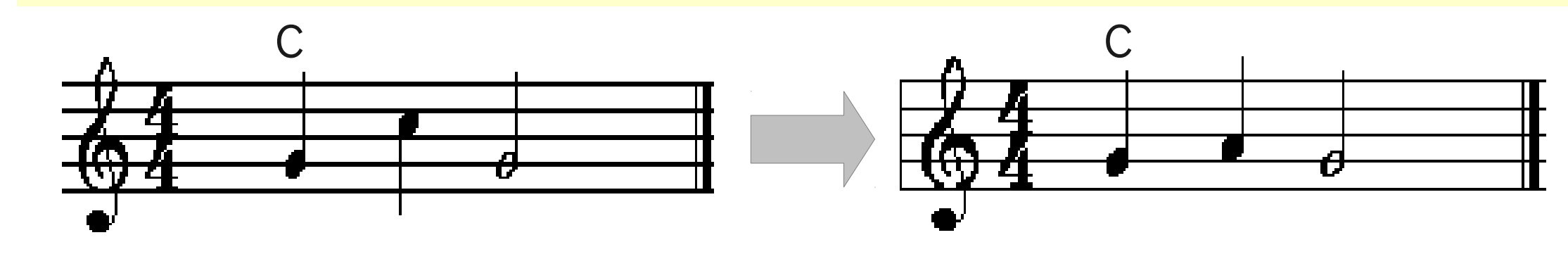
2-2) Passing tone rule



System overview



2-3) Neighbor tone rule



3) Chord tone rule

