

## CSCE 190 Problem Solving

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### **Problem:**

Other instrumentalists are tired of violinists having all the best music in the orchestra; let alone all the solos. The violinists are tired of always being in the spotlight and would like to play an accompanying part rather than the melody. Musicians also want to know what the piece sounds like a group, for their instrument, or for other instruments/sections. The proposed solution is to translate music easily between the different clefs and ranges used by musicians. Additionally, the solution aims to have the ability to play the correct music from a YouTube video.

### **Who is experiencing the problem?**

All musicians

### **What is the problem?**

Pieces of music are typically written where only a few sections of the orchestra have the melody at time or through the entirety of the piece. Musicians want to easily convert a piece of music, or theme, written for another instrument to one written for their own. Translating between clefs is a skill that can be hard to attain; furthermore, finding the correct range on the instrument may be even more difficult. Musicians not being able to easily find a video on YouTube of the piece that is correct.

### **Where does the problem present itself?**

In all music, ranging from classical orchestra music to solo music to fun pieces.

### **Why does it matter?**

It is a Google translate for ALL instruments. Also letting others step in when they all the violins get sick. Also allows the whole orchestra to easily figure out what the melody is and who has it. Hearing the piece, helps practice.