Journal Report 21
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Period 1, White

Daily Log

0.1 Thursday February 27th

As my code fingered "Por Una Cabeza," it could do so mostly successfully but encountered an error in that it would put the same finger consecutively for different notes. This problem came from the fact that it followed the directions of my "hand position" dictionary rigidly without accounting for chromatic or whole note stepping. Essentially, my code worked better for pieces that had large jumps and spans but not so much for pieces like "Por Una Cabeza," where the notes are quite close together. To start solving the problem, I implemented another round of scanning that identified areas of the piece that made this mistake, as well as its section.

Monday March 2nd

I finished fingering "Por Una Cabeza" by writing a method that takes in the locations of repetitive fingerings and redistributes fingers as necessary. It identifies the minimum and maximum points in the section (similar to how the lateral shift method does this) in order to correctly position fingers.

Thursday March 5th

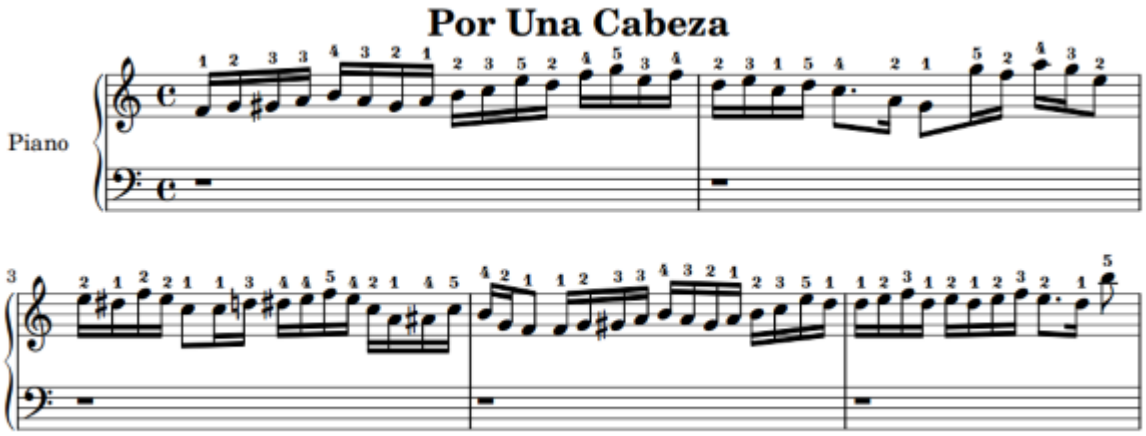
I noticed problems with how my code exports LilyPond files, especially in how it deals with rest placement and filling in left hand rests. Because I remove all rests before fingering and then place them back in when it's all done, I have to account for indices that are constantly shifting when I start the process of placing them back into the piece. I also have my code able to take the time signature from my MIDI file and communicate that to my file export method. At this point, I'm confident in how I am exporting LilyPond files.

Timeline

Date	Goal	Met
February 21st	Be able to handle crossovers in succession (e.g. 2-octave scales)	Yes, I successfully fingered a 2-octave scale.
February 28th	Be able to finger and output ”Por Una Cabeza.”	I fixed the thumbs on black key problem, but still need to iron out some problems.
March 6th	Finish ”Por Una Cabeza” and integrate new version of ”place fingering” method with the motif algorithm to generate fingering variations	I finished Por Una Cabeza and fixed some output problems in LilyPond
March 13th	Integrate new version of ”place fingering” method with the motif algorithm to generate fingering variations	–
March 20th	Evaluate whether a given fingering is better suited for a large or small hand	–

Reflection

Below is a before-and-after comparison of how my code fingers and outputs ”Por Una Cabeza.”




Piano
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