Daily Log

Monday January 6

I am learning how to use the Lilypond music notation software, as it will be useful for me to format and export my final product: a pdf of a music sheet that has been fingered. When installing, LilyPond automatically provides a "test.ly" file. Today, I managed to manually re-create that in Pycharm as a first step to understanding how LilyPond works.

Tuesday January 7

I generated a piano template, with appropriate notations for treble clef, bass clef, and staffs. Using the template, I could start with a default LilyPond text file and overwrite necessary information such as the piece name and notes. I started writing a method that takes in piece name, composer, right hand notes, and left hand notes and aims to place in the information and eventually export a pdf file with the information reflected with proper musical notation.

Thursday January 9

I researched LilyPond's documentation, reading up on the difference between relative and absolute notation. The piano template given by LilyPond that I found on Tuesday did not suit my purposes because it was in relative mode, which is more difficult for a computer to generate, so I created my own custom-made template in absolute mode. I also looked into LilyPond editing programs, such as Denemos, but they proved to be too complex to be useful for my purposes.

Timeline

Date	Goal	Met
December 27th	Winter Break	–
January 3rd	Winter Break	–
January 10th	Be able to generate a .ly file with correct notes	Created a .ly template
January 17th	Be able to generate a .ly file that reflects the notes and fingering	–
January 24th	Debug the program's issues with fingering Fur Elise	–

Reflection

This week, I began looking at LilyPond documentation and generated a useable template for any given piano piece. Below is a snippet of code created in Pycharm as a .ly file as well as the pdf generated from that. This will be the format of my code output. The user can open a file with LilyPond and a pdf will automatically be generated.

```
\header{
title = "Believer"
subtitle = "Imagine Dragons"
}

\score {
  \new PianoStaff <<
    \set PianoStaff.instrumentName = #"Piano  "
    \new Staff \absolute { \time 4/4 a'4 e''4 d''4 d''8 c''8 d''4 d''8 e''8 d''8 c''8 a'8 g'8 a'4 e''4 d''4 d''8 c''8 d''1}
    \new Staff \absolute { \clef "bass" <a, c e>1 | r1 | r1 | r1}
  >>
  \layout { }
  \midi { }
}
```