Objective

LoFi music is an important part of almost every college students study routine, especially in our major. For our project, we would like to build and train a deep learning model that will be able to generate new LoFi music after listening to a dataset of already created LoFi music. We are planning on building this model from the ground up, meaning no pretrained model will be used. We plan on building a model that will be able to take in and output sequential data, whether that be an RNN-LSTM model or a transformer model.

Dataset

We have found this dataset on github that contains over one hundred .midi files for LoFi music. We plan on using the sequences of notes and chords in these .midi files to predict the next note in the sequence. With this, we can get a new sequence of notes and chords that will represent a new LoFi song.