

Tensor Hero Frontend

MLIR 2022 Final Project

What is Tensor Hero?

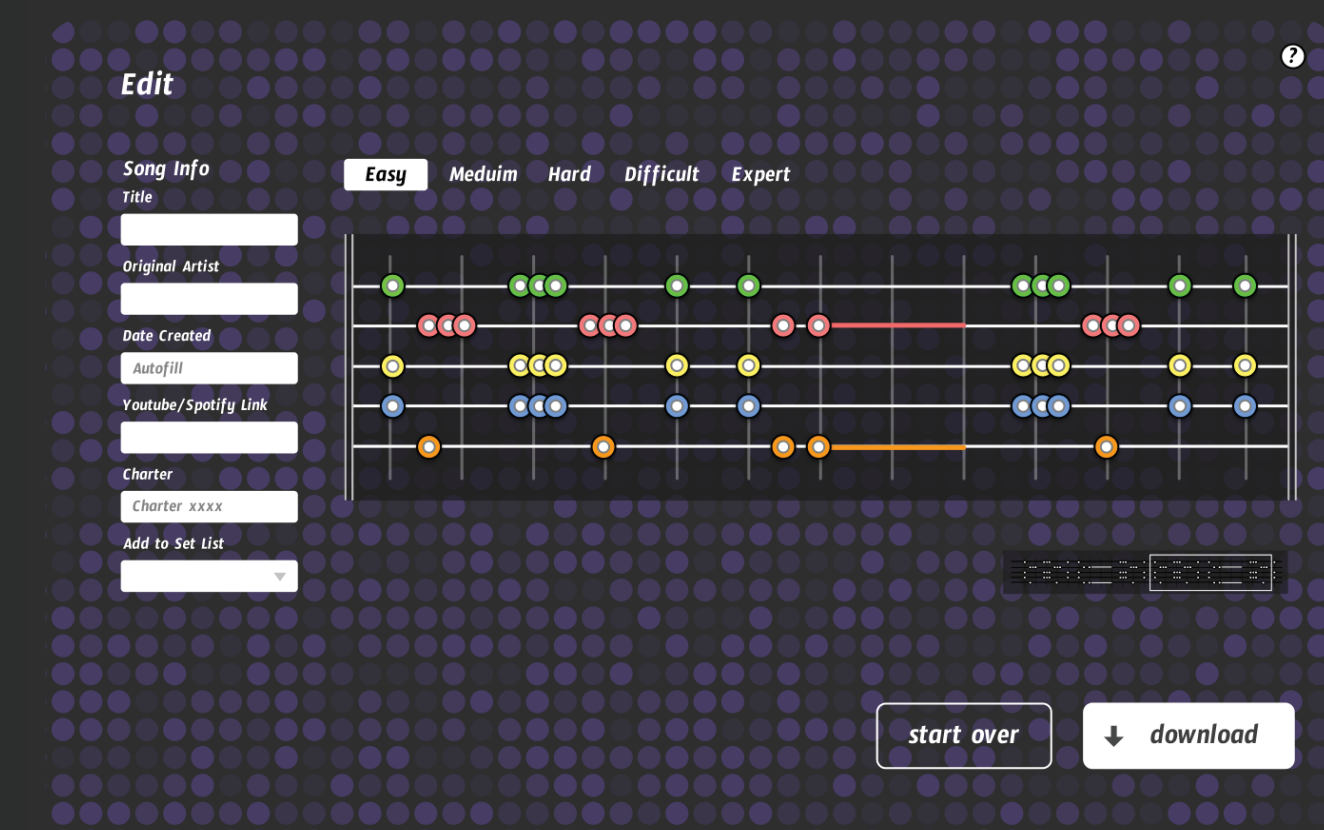
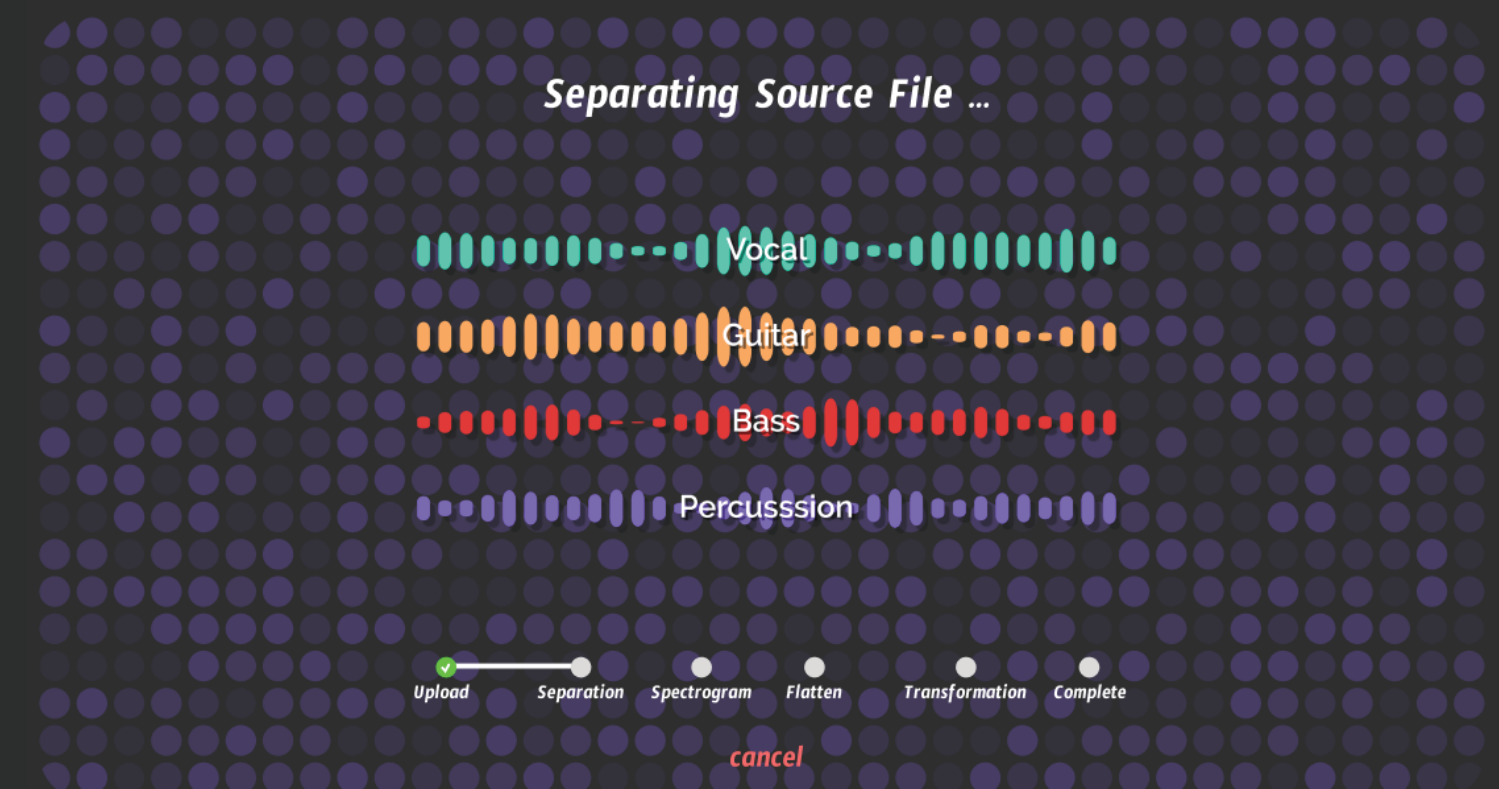
Clone Hero is a community run online rhythm game that emerged after Guitar Hero, the popular music rhythm video game franchise, went defunct. It has a passionate community of charters and content creators that produce new Guitar Hero charts for users to play. However, most charters are highly experienced players that they only create expert level charts, leaving the barrier of play rather high for new players. Charting is also quite time-consuming, and there is no central platform to source all the charts out there that promotes player engagement.

Tensor Hero aims to provide a solution for users to not only generate a chart file from any song using an ML model, but also as a place to share and explore content created by other users in one location.

Project Highlights

Song Processing and Model Representation

The song file is then sent to the server where it is processed and run through the backend model. After the completion of each step of the process, the frontend receives an update and communicates that information to the user in the form of visualizations. These visualizations help to provide a layer of transparency to the users about the mechanisms of generating chart files.



Real-time Chart Interaction & Visualization

Once the process is complete and the chart generated, the user can visualize the entire chart in real time. The chart is linked to the audio file so that the chart will scroll as the audio plays, mimicking the Clone Hero interface and creating a realistic user experience.

One Place For All Charts

Charts hub hosts all the charts uploaded to or generated by Tensor Hero. User is able to search by artist and song title, and each song is presented in a card form that groups useful information and features about the song, and the user can further explore its details and visualization in the next page.

