

Outline Document

Researcher: David Nwokoye

Presentation Title: Guitar Notation with Media Interface

Research Focus: Improve on an existing format of guitar notation for the purpose of teaching, sharing, archiving and practicing.

School: University College Cork Student Level: Bachelor of Science Computer Science

Presentation Type: Online Delivery

Motivations for the Project

Guitar notation software has become very popular over the last decade. This is due to the rise in popularity in social media like YouTube, Instagram, Facebook and TikTok. Assisted by the accessibility of audio and video recording software, the demand for musicians to share and acquire knowledge has led to many innovations in guitar notation software. For all the strides that have been made, I feel there's still a lot of room for improvement.

As a musician that is very experienced in guitar, I spend a lot of time learning songs through reading guitar tabs. I also create videos and tabs to accompany the video. All the current methods of creating/reading guitar tabs don't have a way to have video playback alongside it. When learning songs, it would be beneficial to be able to see a video demonstration along side it at the same time. The current form creating tabs from a video requires the user to tab between the video and software they're using. As a result, it can be quite tedious.

Notes are written using number keys. It's not a problem for notes on single digit frets but once the user reaches double digits, it becomes very cumbersome.

The aim of my project is to add to the many innovations in the form of embedded media and an improved UI.

Technologies to be used for the Project

This project will be developed in the Java programming language for both front and backend. The Java language is well optimized for backend and has tons of libraries and support for front end.

Goals for the Project

The expectation is to create a program with these features: embedded media, a more intuitive UI, sharing and archiving.

Embedded media: This includes both audio and video to accompany the tablature in a timeline.

A more intuitive UI: A more ergonomic way of creating guitar tabs

Sharing and Archiving: Information should be exported in multiple supported formats that can be shared over the internet.