Enoch Ikunda & Jonathan B. Moore

COS184 Project Proposal

4/12/2021

MP3 Player

# Summary

The decision to attempt this project is based on a shared interest in digital music playback technologies among the project team. Among other things, this project will introduce team members to the basics of audio playback, GUI implementation, file systems, and the mp3 file format

# Features

This software should have a feature set that is rich enough for general-purpose consumer mp3 playback while staying within the constraints of the project. With this in mind, the following is a proposed feature set:

* A graphical user interface (GUI)
* The ability to select a file for playback from a list within the software
* Playback functions, including play, pause, stop, skip track, and previous track.
* Displays track information

## Dependencies

The pygame library will be used for the main software functions. Tkinter will be used for developing the GUI.

# Phases

Development of the project will be split into 5 phases, with each phase defined by its feature set:

1. Program plays a predetermined mp3 file from the terminal.
2. The program can select and play a song from a list of songs.
3. The program can play, pause, stop, skip, and play previous songs.
4. Implementation of a graphical user interface
5. Program displays track information during playback.

# Additional Features

In the unlikely event that the above feature set is fully implemented well before the project submission date, the following list of additional features could be implemented:

* The program visualizes the audio stream during playback
* The program can “shuffle” song order for playback
* The program can display information about an album