Milestone 2

https://csil-git1.cs.surrey.sfu.ca/dttan/cmpt433-group123-project.git
group123

Our system simulates a music player using the BeagleBone, Zen Cape and an external 16x32 RGB LED Matrix from Adafruit. The system allows audio playback functions such as play, pause, stop, rewind, volume control, etc. For more details please consult the original project proposal.

There are no project changes given our current progress. One of the most time-consuming parts, the LED Matrix, is almost completed, as well as some of the playback functions such as play, pause, and volume control. Clearly, the playback functionality has fallen behind schedule, but it is simple and trivial compared to the difficult ones. Therefore, we feel confident going forward with our initial plan. The proof of our accomplishments is somewhat difficult to show, as we have an external LED display. However, the modularized source code provided in the ZIP and git repository link should provide a good overview of our current progress.

Partially Complete / Complete / Incomplete or Fallen Behind

Feature	Tasks	Progress
LED Matrix Panel	1. Read audio file content, most likely the file header containing most of the necessary information on the file itself 2. Store the header information into an array and index it to display information on the LED Matrix Panel Acceptance Criteria: 1. Display will show Time Remaining, Track Name, Album Name, Artist Name and Mode of the current playing song	1. Since reading audio file metadata is partially implemented, we have yet to thoroughly test the display 2. Some details and error handlers need to be implemented as certain file formats have no metadata to read
Audio Playback Features	Acceptance Criteria: 1. User can adjust volume by turning the potentiometer 2. User can pause / resume current playing song 3. User can change mode to shuffle on / off, repeat on /off by double pressing down the joystick 4. User can rewind song by pressing left (if over 2 seconds in the song) 5. User can switch between playlists by pressing up/down of joystick	1. Only WAV files are supported at the moment. We plan to use an MP3 library to deal with such format 2. Scan a music directory for a list of audio files to play is partially implemented