Final Project Checklist

- ☐ Note Identification
  - ☐ FFT compiled, show's correct logic analyzer output
  - ☐ FFT outputs correct bins for desired range of hearing
    - Final Range: _____ - _____
    - Number of bins: _____
  - ☐ Note Logic correctly identifies artificial input for one octave
  - ☐ AC97, FFT and Note Logic work together (Demo displaying notes on hex display)
  - ☐ Whole system responds well to at least one instrument for all C major scale whole notes
  - ☐ Optional: Sharps and Flats identified.
  - ☐ Very optional: Multiple notes identified.
- ☐ Game Logic
  - ☐ Menu input and state output simulate correctly
  - ☐ Menu sends correct song start location signal when starting game
  - ☐ Score Updater updates score and sees hits correctly
  - ☐ Menu sends active reset signal to other modules when appropriate
  - ☐ Optional: Maintain a high score table for each song
- ☐ Musical Score Loader
  - ☐ Song files are properly stored / accessible from EEPROM
  - ☐ A single song is loadable and does not have any invalid output
  - ☐ All available songs load and play correctly to their own tempos
  - ☐ Extraordinarily optional: be able to feed in a MIDI file to play
- ☐ Display
  - ☐ A single note blob moves across the screen properly (ease in right, ease out left)
  - ☐ The cstringdisp module is integrated and shows the score, current pitch
  - ☐ Creating a testbench to simulate inputs from the game logic, test hit pitches
  - ☐ All note blobs are onscreen and transition smoothly
  - ☐ Optional: Load background images in, such as a recorder finger chart
  - ☐ Optional: Use bitmaps instead of notes
  - ☐ Optional: Cool effects like fading notes and changing colors
- ☐ Integration
  - ☐ Display and Musical Score Loader correctly stream a song
  - ☐ Given switch inputs for notes, score and note hit displayed correctly during the game
  - ☐ Integration with FFT complete, can play an entire song
  - ☐ Menu interface complete with only one song
  - ☐ Multiple Songs available on the menu
  - ☐ Optional: Freeform/Sandbox mode for just playing an instrument to see how it registers