Check List:

Overall:

- ∇ Play a staff with several notes in front of the camera and listen to the notes after image capturing and note identification
- ∇ Expand the music sheet to contain more than one staff and several sheets of music (if time permits)

Jing Han:

- √ Filter Module:
 - o Image displayed in black and white
 - o Adjustable cut off using buttons
 - o Freeze image
- $\overline{\bigvee}$ Image Orientation Module: Adjust the paper to match the square on the screen
- √ User Interface:
 - o Underline the note played

If time Permits:

- User Interface
 - o Multiple instrument selector
 - o Volume controller
 - o Spectrum display
 - o Play/Pause buttons

Lance Collins:

- √ Player: Programming with music data and listen, compare with computer output
- $\overline{\bigvee}$ Tone Selector:
- $\overline{\bigvee}$ Tone Parameter:
- $\overline{\bigvee}$ Theta Memory:
- √ Note Generator (piano, Violin, Cello, Flute): scales and aggregated tones into notes
- √ Note Aggregator: Chords, play instruments simultaneously
- √ Note Amplitude Calculator (Piano, Violin, Cello, Flute):
 - o ADSR functionality
 - o Harmonic Relative Frequencies

If time Permits:

• Add reverberant effect to sound

Dilini Warnakulasuriyarachchi:

- $\overline{\lor}$ Pixel Filter: Image displayed on the screen and compared with the ZBT image
- $\overline{\bigvee}$ Staff Finder: Display the identified staff lines on the screen
- $\overline{\lor}$ Note Finder: Display the note on the hex display
- $\overline{\lor}$ Beat Finder: Display 4,2,1 (whole note, half note, quarter note) on the hex display
- $\overline{\lor}$ Minor FSM: Activate staff finder, note finder and beat finder with enable signals generated by using switches

If time Permits:

- Attempt to evaluate multiple staff lines at once
- Identify chords and other musical effects such as ties, rest, crescendos etc.