Knights of Notation Feedback From Christopher

**Positive Feedback**

**Clear Separation of Concerns:** The code is well-structured, separating logic for fetching, decoding, and rendering MusicXML data cleanly.

**Proper Error Handling:** Includes multiple checks and console.error statements to handle issues like invalid XML or failed fetch requests.

**Performance Debugging:** Uses console.time and console.timeEnd for measuring load and render performance.

**Custom OSMD Extension:** The CustomOpenSheetMusicDisplay class enhances functionality by exposing the VexFlowMusicSheetCalculator, allowing deeper customization.

**Constructive Criticism**

**Inefficient Base64 Decoding:** The decoding method manually maps characters to charCodeAt(0), which could be optimized by directly using Uint8Array conversion.

**Potential Memory Leak:** The cleanup function removes osmdRef.current, but osmdInstance is not explicitly disposed of, which might cause lingering event listeners.

**Limited OSMD Configuration:** The OSMD instance is initialized with autoResize: false, which might not be ideal for varying screen sizes; consider making this dynamic.

**Missing TypeScript Safety:** The decodeBase64XML function could benefit from explicit TypeScript types to enforce input validation and avoid potential runtime errors.

LeapFrog Feedback From Peyton

**Positive Feedback**

**UI:** The app has a clean and minimalistic user interface

**Dark Mode:** Users can switch to a dark mode theme for better visibility and a better user experience

**Automatic Count After Sorting:** After sorting, the app automatically provides a count of results which can save the researchers time in their gathering of data

**Intuitive Results Table:** The results table is designed for an intuitive user experience.

**Constructive Criticism**

**Tweak Picture Sorting Order:** Arrange pictures based on the lowest confidence for better organization and to allow the researchers to quickly identify the false positives.

**Backend Processing Indicator:** Display an indicator to show when the backend is processing so that the researchers can see the progress of the model and see when it is about to finish.

**Enhance Navigation Between Pages:** Improve navigation between the sort page and the results page. Make it so that you can automatically navigate to the results page from the sort page, especially after sorting.

**Activate Additional Buttons:** Enable functionality for buttons like "Open Folder," "Frog," and "Not Frog."