Image Sonification

Week 5: Developing the Image Sonification Tool

Objective: Integrate your work from previous weeks to create a complete tool for sonifying astronomical images.

Assignment Details:

1. Tool Development:

- Combine the code developed over the last two weeks into a single tool that allows users to upload an image and select a sonification mode.
- Implement at least two sonification modes (e.g., brightness-based pitch modulation and color-based sound effects).
- Develop a simple interface (CLI or console-based) for ease of use and ensure the tool outputs a complete sound file of the image.

2. GitHub Requirements:

- Continue to update your repository, making detailed commits (e.g., "Integrated pixel extraction and sound mapping" or "Added CLI for tool").
- Include a user guide in your repository (README.md or a separate document)
 explaining the tool's features, setup instructions, and different sonification modes.
- Tag your repository with a release version (e.g., v1.0) and submit your GitHub link for review.

3. Deliverables:

- Final GitHub repository link containing:
 - The complete tool code with the necessary dependencies (requirements.txt if applicable).
 - A user guide detailing how to use the tool.
 - A sample image and its corresponding sonified sound file.
 - A final report summarizing your experience, challenges, and potential improvements.