Title: Film Format Compliance Report for Narbonne Online Film Festival

Introduction:

The Narbonne Online Film Festival mandates strict technical specifications for films submitted to ensure optimal viewing experience across various platforms. This report analyzes films in the "Films" folder, checking for compliance with the festival's requirements. Films failing to meet specifications are flagged, and if necessary, converted to the appropriate format using FFmpeg.

Analysis:

The code iterates through each film file in the folder, extracting video metadata using FFprobe. It inspects key parameters such as video codec, resolution, frame rate, aspect ratio, bitrate, and format. Films failing to meet specifications are identified based on the festival's criteria:

1. Codec: All films should be encoded in H.264 for compatibility.
2. Resolution: The festival requires a resolution of 640x360 pixels.
3. Frame Rate: Films should have a frame rate of 25 frames per second.
4. Aspect Ratio: A standard aspect ratio of 16:9 is expected.
5. Bitrate: Bitrate should range between 2,000,000 and 5,000,000 bits per second.
6. Format: Films should be in MP4 format.

Results:

The report "format_check_report.txt" lists films with discrepancies from festival specifications. Each entry includes the film's name along with problematic fields such as codec, resolution, frame rate, aspect ratio, bitrate, and format.

Conversion:

For films failing to meet requirements, the code initiates conversion using FFmpeg. It transcodes the films to the required format (MP4) with the appropriate settings: H.264 codec, AAC audio codec, 25 fps frame rate, 640x360 resolution, and bitrate within the specified range.

Conclusion:

The code effectively automates the process of ensuring film compliance with the Narbonne Online Film Festival's technical requirements. By systematically checking and converting films, it streamlines the submission process, enhancing accessibility and consistency for festival viewers. Continuous monitoring and adjustment of the code will ensure seamless adherence to evolving festival standards.