TPA 1: Video Categorization based on Camera Movement, static (news vs. cartoon) vs. non-static (Pan, Tilt, Zoom or combination)

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Problem Statement: Classification of video shots into different categories based on camera movement. Three types of camera movements are to be considered, pan, tilt, and zoom. We are primarily looking at developing a system that classifies video shots based on camera movement (initially), then based on the genre. A typical dendogram is given below.

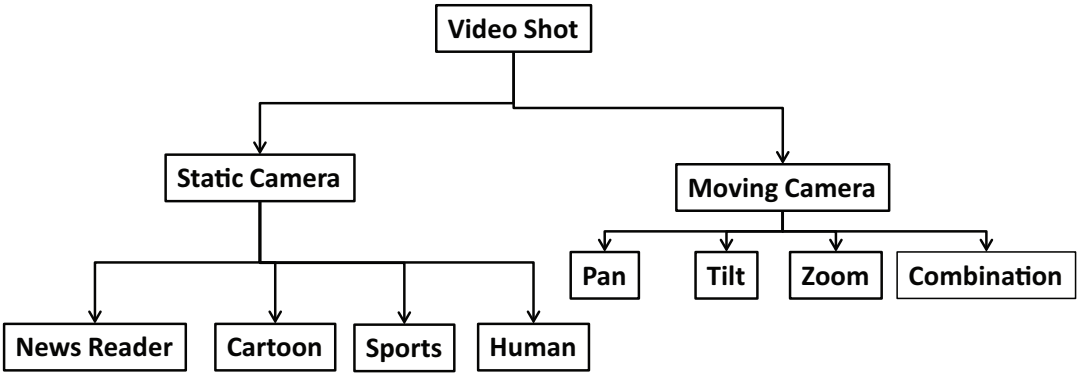

Figure 1: Different Video Categories

Input:

- A query video shot with or without camera movement.

Expected Output:

- Detect the type of camera movement.
- Detect the video shot genre.

Hint for excellence: *Special Credit will be given if the designed system could capture multiple camera movements in a single video.*

References

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