# TPA 4: Automatic Video Shot Classification using Visual Features

**Problem Statement:** This project is aiming at classifying video shots into different groups based on its visual content. The classification (or grouping) has to be done automatically using visual features only.

#### Input:

• A collection of video shots belonging to different categories e.g. cartoon, news videos, sports videos etc (moving and static camera video shots).

# **Expected Output:**

- Automatically group the video shots into different categories
- Given a query video shot determine the class label of that shot

**Hint for excellence:** Special Credit will be given if the designed system could able to handle videos with multiple objects.

### **Dataset and Sample Source Code**

- http://home.iitj.ac.in/ arunbalajeev/
- http://www.cse.yorku.ca/vision/research/dynamic-scenes/

#### References

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- 4. Juan Carlos Niebles, Hongcheng Wang and Li Fei-Fei, Unsupervised Learning of Human Action Categories Using Spatial-Temporal Words, IJCV 2008.
- Yicong Tian, Rahul Sukthankar, Mubarak Shah, Spatiotemporal Deformable Part Models for Action Detection, CVPR, June 2013

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