CSE3018 CONTENT BASED IMAGE AND VIDEO RETRIEVAL LAB
EXERCISE - 2

DATE: 11.02.2021

Implement a CBIR system that uses features derived from Color Descriptors.

Database – Minimum 10 images and 2 categories

Note :

1. Read an image in RGB Color Space

2. Transform this image into other color spaces like CMY, HSV and Grayscale. Show all of them in a 2X2 subplot.

3. Execute color plane slicing in RGB color space.

4. In each of the plane of R, G, B, extract statistical features like mean, standard deviation, variance, skewness, kurtosis. A single image will have 5 features in each color plane. So totally 15 color based features for every image; Also extract no. of rows, no. of columns and no. of color channels in an images. So 3 features. Altogether, every image will contain 18 features.

5. Write in an Excel File, in a format like the one given below:

Image Name	Red – Mean	Red – Variance	…	Green – Mean	Green - Variance		Blue – Mean	Blue - Variance	No. of Rows	No. of Cols	No. of Color channels