PÉCSI TUDOMÁNYEGYETEM
UNIVERSITY OF PÉCS

University of Pecs
Faculty of Engineering and Information Technology

Image Processing
Homework No. 3.

Download the sample image database from the Neptun Meet Street for the image classification problem.

In the classification folder you can see eight different sub-folders (brown teddy, green log, …etc) and a MISC folder with „teach" and „test" subfolders.

Make your teaching database as: MISC/teach + half of your 12 homework images (6), totally 26 images.

Your test database: MISC/test + second half of your 12 homework images (6), totally 14 images.

1.	BNVNLF	brown teddy
2.	XZPAYO	green log
3.	XEWS8F	labello
4.	VINQ0M	red log
5.	TYR95I	yellow plastic
6.	VCXIFG	brown teddy
7.	EUZ95C	green log
8.	GJ05LJ	labello
9.	BHZPGK	red log

Tasks:

- find the best region and color (from R,G,B) for the classification (first parameter). The second parameter will be the number of 1 pixels after the thresholding (binary image);
- make a classification using colors and your teaching database;
- show the classification graph;
- calculate the decision line;

- make a test with your test database and make a decision abour every test images.
- show the test results;
- calculate the specificity and sensitivity of your test method

Have a good work!

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