Creative Computing 2 (IS52020A) Assignment (Resit) : 2010-11

Image Information Retrieval

A. Your task for this part of the coursework is to implement, in *Processing*, the calculation of the overall average colour of an image. You may assume that the input image's colour profile is the standard colour space for modern digital displays (*i.e.* sRGB), and that each image pixel contributes equally to the overall average. Your sketch should provide its user the ability to view the calculated average colour as numerical values in sRGB, CIE XYZ and CIE L*a*b* spaces, and as a coloured area within your sketch.

As your submission to this part, include: your *Processing* sketch code; the numerical values from running your sketch on the accompanying source image; and a short (less than one A4 page) report including a description of how your code works and an explanation of any choices you made. [40%]

B. Design and implement a *Processing* sketch which acts as a visualization of a small (between 10 and 100) collection of images. You must should provide some means of navigation through the collection, and must show some information about the images in addition to simply displaying them.

As your submission to this part, include your *Processing* sketch code, any source materials along with origin and attribution, and a short (less than one A4 page) description of what your sketch is intended to show, how the navigation through the collection works, and how successful you think your visualisation is. [60%]

The deadline for this coursework is **Thursday 1st September 2011**. Sketches must be submitted electronically by e-mail to `c.rhodes@gold.ac.uk`; written components may be submitted electronically to the same address (in plain text or Portable Document Format **only**) or as hardcopy to the Department Office by 4pm on the day of the deadline. Your submissions will be assessed for how successfully they fulfil their briefs, the technical content of the sketches, the clarity of your written descriptions, and any added value.