Subject: Leptonica library support Posted by mdelfede on Sun, 06 Sep 2009 16:12:27 GMT

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Hi,

I started the porting to UPP of Leptonica image library (http://www.leptonica.com/).

The library provides many high-level raster operations on almost all pixel formats, like morphing, blending, pattern finding, document layout recognition and much more.

The library in bazaar by now wraps just a small amount of Leptonica functions, as the list is really huge, and will be extended in time.

There are 2 packages plus a test application:

PixRaster package: provides PixRaster class wich encapsulates PIX and PIXA Leptonica images and array of images.

It's a multipaged raster class, similar of MemoryRaster, but with many extensions.

Documenting is in progress (almost) with the function wrapping.

PixRasterCtrl package: provides PixRasterCtrl control, which (similar to RasterCtrl for StreamRaster class) provides display and more of Pixraster objects.

The test application demonstrates the usage of both; by now it duplicates just one of the huge amount of examples of Leptonica library, but it'll be extended too.

The example demonstrates background line removal, i.e. the "cleaning" of a scanned drawing originally drawn on a paper with horizontal lines. It uses deskewing of image (elimination of page rotation during scanning process), gray morphing and mask blending, with a really nice result.

On next days I'll add an example about document layout recognition, i.e. the separation of graphic and text parts of a scanned document.

Please beware, the porting has just begun, so it's surely not bug-free nor complete. If somebody wants to help me with extending the lib/docs is wellcome!

Ciao

Max