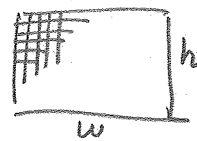


Dig. Photogr. Systems Homework 1

assigned Thur 10 Jan 2013, Due Thur 17 Jan

1. Locate a digital camera that you can use for a project (DSLR, phone camera, point & shoot, ...).
2. Do some research to find out about the optics and the sensor. Good sources are user manual, manufacturer web page, other internet sources, JPEG header listing (jhead.exe)
3. Determine:
 - (a) make & model
 - (b) focal length or range of focal lengths if zoom units usually mm
 - (c) max w and h of sensor in pixel units
 - (d) actual dimensions of sensor, w and h in mm
 - (e) detector pitch (pixel spacing in mm)
 - (f) sensor manufacturer (Sony, Kodak, ...) + model # + specs.
4. If possible, it is good to have (a) manual focus, (b) the ability to disable image rotation for landscape vs. portrait.
5. Submit a report on your findings.



(c,d,e are related!)

```
W: \photo1_13>j head_ex  
j head img_5194.jpg  
File name      : img_5194.jpg  
File size     : 5270717 bytes  
File date     : 2010:11:08 11:09:46  
Camera make   : Canon  
Camera model  : Canon EOS DIGITAL REBEL XT  
Date/Time    : 2010:11:08 11:09:44  
Resolution   : 2304 x 3456  
Flash used   : No  
Focal length : 28.0mm (35mm equivalent: 45mm)  
CCD width    : 22.17mm  
Exposure time: 0.0025 s (1/400)  
Aperture     : f/9.0  
ISO equiv.   : 400  
White balance: Auto  
Metering Mode: matrix  
Exposure     : program (auto)
```