

# Sketching interactive graphics

## *preparation – to be done before the lab*

*must be completed to attend the lab*

### Practical

- Find a partner for the lab, as the lab is done in groups of two.
- Download and run through some of the Processing examples.
- Read through the description of the Processing Environment:  
<http://www.processing.org/reference/environment/index.html>  
We will be using the “Continuous” programming mode and the default rendering mode.
- Bookmark the Processing Language API page, this is an important resource!  
[http://www.processing.org/reference/index\\_ext.html](http://www.processing.org/reference/index_ext.html)
- The Learning page has a set of examples for the common things that you might want to do.  
<http://www.processing.org/learning/index.html>
- Make sure that during your work, you save all the different sketches in your Documents folder, using File > Save As.
- Make sure that you look in the documentation if you get stuck and always read the error messages carefully if you run into problems. Processing has a very nice set of references, with clear examples and sample code for most of the functionality, and the error messages are usually understandable and useful!

### Software

- Processing (installed in Lab halls)  
<http://www.processing.org/>

### Preparation Assignment: Basic drawing & input

1. Create a new Sketch called Sketch\_1.
2. Create a class that can hold the properties of a geometric object (for example, position, size, shape, color) and create instances of this class.
3. Create at least 5 different geometric shapes (instances of your class) that are drawn on the screen using different sizes, shapes and colors.
4. Map the position of one shape to the position of the mouse cursor.
5. Randomize a different color for that shape when you click the mouse.
6. Render text which displays the position of the mouse cursor on the screen using the text and font functions in Processing.
7. Change the size of the shape using the arrow keys (smaller vs. larger).
8. When you are done, archive your sketch (Tools > Archive Sketch), and submit it.