Animating your Drawings

Basics of Animation

Produced by:

Department of Computing and Mathematics



Topics list

• The setup() function.

The draw() function.

System Variables in Processing.

void setup()

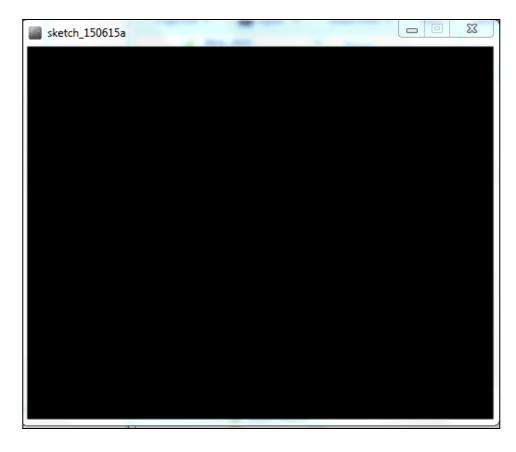
 setup() is called once when the program starts and should <u>not</u> be called again.

 setup() can set the screen size and background colour.

 There can only be <u>one</u> setup() function for each sketch.

void setup()

```
P sketch_150615a | Processing 2.2.1
File Edit Sketch Tools Help
  sketch_150615a
void setup()
  size(500,400);
  background(0);
```



Topics list

• The setup() function.

• The draw() function.

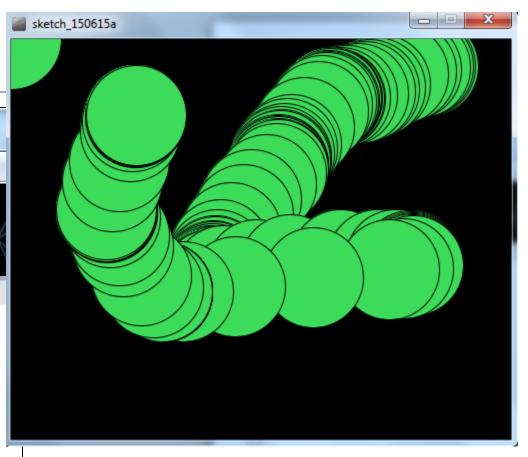
System Variables in Processing.

void draw()

- You should never call the draw() function.
- Processing automatically calls the draw() function straight after the setup() call.
- draw() <u>continuously</u> executes the code contained inside it.
- There can only be one draw() function for each sketch.

void draw()

```
P sketch_150615a | Processing 2.2.1
File Edit Sketch Tools Help
 sketch_150615a
void setup()
  size(500,400);
  background(0);
void draw()
  stroke(0, 0, 0);
  fill(60, 220, 90);
  ellipse(mouseX, mouseY, 100, 100);
```



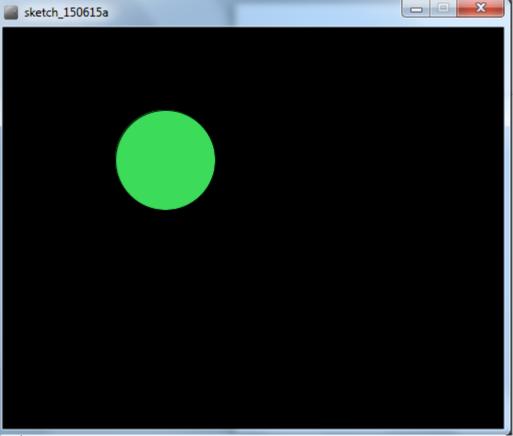
mouseX = x co-ordinate of mouse pointer
mouseY = y co-ordinate of mouse pointer

Q: Why many circles?

A: background(0) is in the setup function.

void draw()

```
P sketch_150615a | Processing 2.2.1
File Edit Sketch Tools Help
                           Run
  sketch_150615a
void setup()
  size(500,400);
void draw()
  background(0);
  stroke(0, 0, 0);
  fill(60, 220, 90);
  ellipse(mouseX, mouseY, 100, 100);
```



mouseX = x co-ordinate of mouse pointer
mouseY = y co-ordinate of mouse pointer

Q. Why only one circle?

A. background(0) is in the draw function.

Topics list

The setup() function.

The draw() function.

System Variables in Processing.

System Variables in Processing

Some examples of system variables in Processing:

mouseX (x co-ordinate of the mouse pointer on the

display window)

mouseY (y co-ordinate of the mouse pointer on the

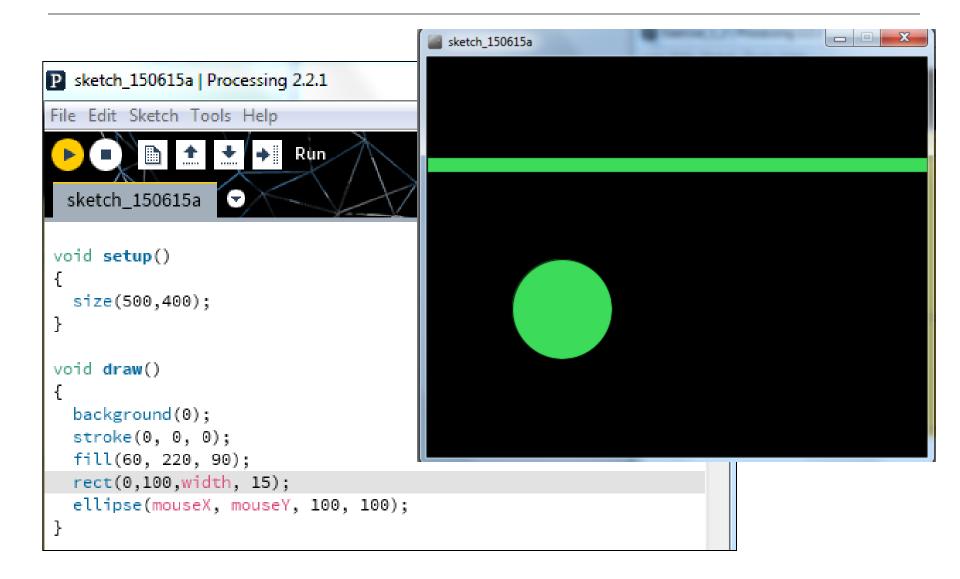
display window)

width (width of the display window)

height (height of the display window)

We don't have to define/create these; we just use them.

System Variables in Processing



Questions?





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