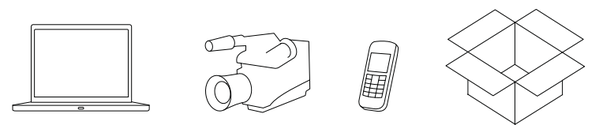
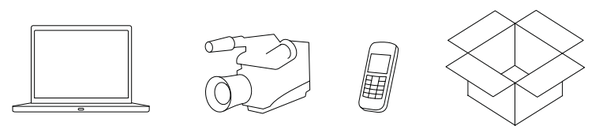
Prozedurale Mediengestaltung

Einführung Processing

Was ist Processing?

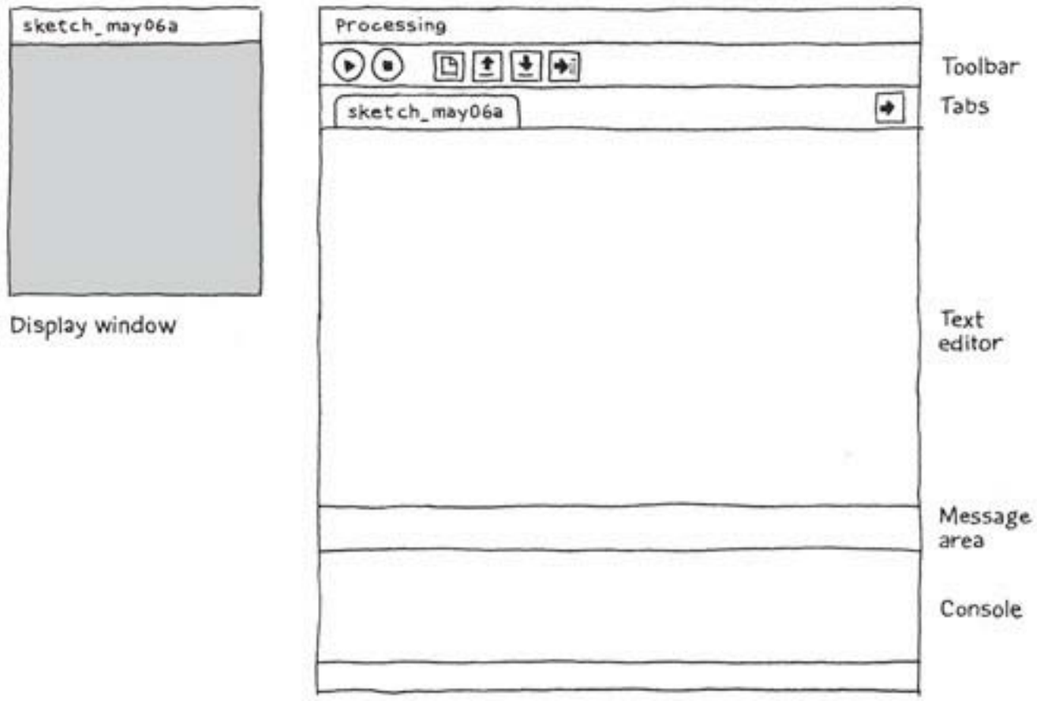


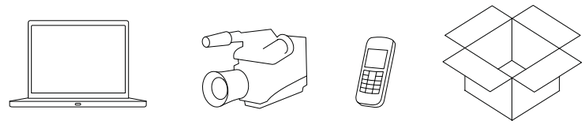
http://processing.org
->Downloads
->Stable Releases
->1.5.1



Prozedurale Mediengestaltung

Einführung Processing

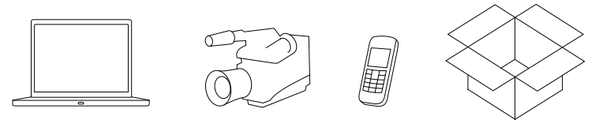




Prozedurale Mediengestaltung

Einführung Processing

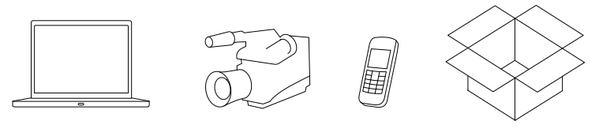
```
line(0,0,50,80);
```



Prozedurale Mediengestaltung

Einführung Processing

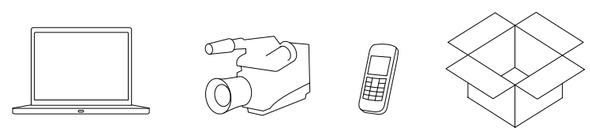
```
size(400,400);
line(0,0,width*0.5,height*0.8);
```



Prozedurale Mediengestaltung

Einführung Processing

```
size(400,400);
background(128,50,0);
stroke(0);
line(0,50,width,50);
stroke(255);
line(0,100,width,100);
```



Prozedurale Mediengestaltung

Einführung Processing

Language (API). The Processing Language has been designed to facilitate the creation of sophisticated visual and conceptual structures.

Structure

. (dot)
super
setup()
class
exit()
void
size()
try
import
/* */ (multiline comment)
false
noLoop()
this
true
new
// (comment)
, (comma)
delay()
pushStyle()
{} (curly braces)
catch
/** */ (doc comment)
draw()
loop()
implements
redraw()
static
; (semicolon)
final
[] (array access)
extends
private

Shape

PShape

2D Primitives

triangle()
line()
arc()
point()
quad()
ellipse()
rect()

Curves

bezierTangent()
bezierDetail()
curveTightness()
bezierPoint()
curveDetail()
curvePoint()
curveTangent()
curve()
bezier()

3D Primitives

box()
sphere()
sphereDetail()

Attributes

strokeWeight()
smooth()
strokeJoin()

Color

Setting

background()
colorMode()
stroke()
noFill()
noStroke()
fill()

Creating & Reading

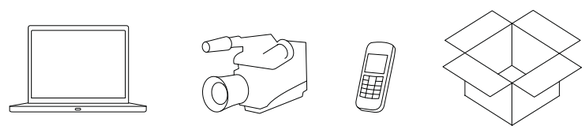
blendColor()
red()
brightness()
blue()
saturation()
lerpColor()
green()
hue()
alpha()
color()

Image

PImage
createImage()

Loading & Displaying

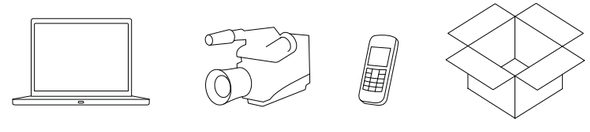
requestImage()
loadImage()
image()
noTint()



Prozedurale Mediengestaltung

Einführung Processing

```
void setup(){
  //wird einmal ausgeführt
}
void draw(){
  //wird jeden frame ausgeführt
}
```

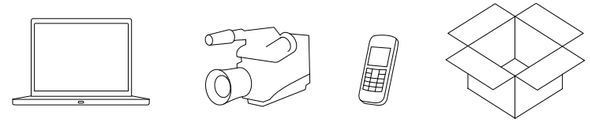


Prozedurale Mediengestaltung

Einführung Processing

```
void setup() {
   size(400, 400);
   stroke(255);
   background(192, 64, 0);
}

void draw() {
   line(width/2,height/2, mouseX, mouseY);
}
```

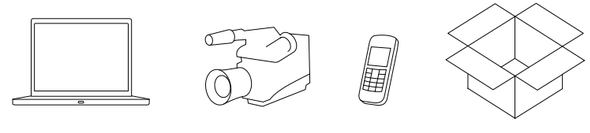


Prozedurale Mediengestaltung

Einführung Processing

```
void setup() {
  size(400, 400);
  stroke(255);
}

void draw() {
  background(192, 64, 0);
  line(width/2,height/2, mouseX, mouseY);
}
```

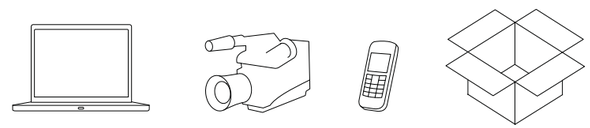


Prozedurale Mediengestaltung

Einführung Processing

```
void setup(){
  size(400, 400);
  stroke(255);
  background(192, 64, 0);
}
void draw() {
  line(width/2, height/2, mouseX, mouseY);
}

void mousePressed() {
  background(192, 64, 0);
}
```



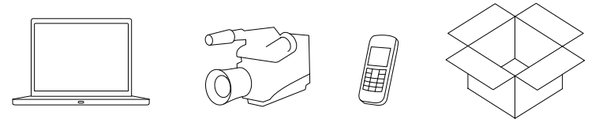
Prozedurale Mediengestaltung

Einführung Processing

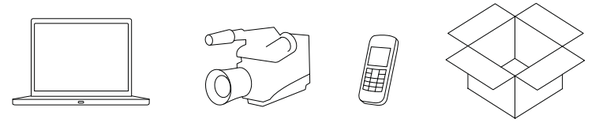
```
int startX = 130;
int startY = 50;

void setup(){
  size(400, 400);
  stroke(255);
  background(192, 64, 0);
}
void draw() {
  line(startX, startY, mouseX, mouseY);
}

void mousePressed() {
  background(192, 64, 0);
}
```



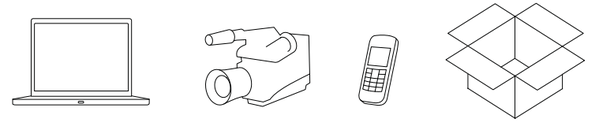
File
->Export Application



Buch:
Generative Gestaltung - Hartmut Bohnacker,
Benedikt Groß, Julia Laub, Claudius Lazzeroni

http://www.creativeapplications.net

http://www.kinecthacks.net/



Processing-Tutorials (1)

Arbeiten Sie folgende Tutorials auf jeden Fall durch:

- **Overview**
- **Coordinate Systems & Shape**
- **2D-Transformations**

Das Tutorial P3D ist auch zentral, wir schauen uns Teile davon im Kurs an

Schauen Sie sich einige Examples an (File – Examples…)

Processing-Tutorials (2)

Folgende Tutorials können optional noch interessant sein:

- **Objects** **(für Java-Programmierer selbsterklärend)**
- **Color**
- **PVector**
- **Images**