

void testApp::setup() {

```
ofSetLogLevel(OF_LOG_NOTICE);
ofDisableAntiAliasing();

box2d.init();
box2d.setGravity(0, 2);
box2d.setFPS(60.0);
box2d.registerGrabbing();

// kinect init
kinect.setRegistration(true);
kinect.init();
kinect.open();

colorImg.allocate(kinect.width, kinect.height);
grayImage.allocate(kinect.width, kinect.height);

nearThreshold = 235;
farThreshold = 170;
ofSetFrameRate(60);
angle = 10;
kinect.setCameraTiltAngle(angle);
verdana.load("brandon.ttf", 85, true, true);
```

```
if (playIntro) {
  filmpje.load("intro_hallonederlands.mp4");
  filmpje.play();
}
```

```
static bool removeShapeOffScreen(shared_ptr<ofxBox2dBaseShape> shape) {
  if (!ofRectangle(0, 0, ofGetWidth(),
ofGetHeight()).inside(shape->getPosition())) {
    return true;
  }
  return false;
}
```

void testApp::update() {

```
if (playIntro) {
  filmpje.update();
  if (filmpje.getTotalNumFrames() == filmpje.getCurrentFrame()) {
    playIntro = false;
    nieuwWoord(aantalSpelers);
  }
  else {
    return;
  }
}

if (playCongrat) {
  if ((filmpje.getMoviePath() == "Scene_goedzo.mp4" ||
filmpje.getMoviePath() == "super.mp4") && filmpje.getTotalNumFrames() ==
filmpje.getCurrentFrame()) {
    nieuwWoord(aantalSpelers);
  }
  else {
    if (aantalSpelers > 1 && (filmpje2.getMoviePath() == "Scene_goedzo.mp4" ||
filmpje2.getMoviePath() == "super.mp4") && filmpje2.getTotalNumFrames() ==
filmpje2.getCurrentFrame()) {
      nieuwWoord(aantalSpelers);
    }
  }
}
```

```
DWORD dw2 = GetTickCount();
if ((dw2 - speelTijd) > speelLimiet) {
  nieuwWoord(aantalSpelers);
}
```

```
if (!wordFound) {
  woordKompleet();
}
```

```
for (int i = 0; i < circles.size(); i++) {
  circles[i].get()->setPrevX(circles[i].get()->getPosition().x);
  circles[i].get()->setPrevY(circles[i].get()->getPosition().y);
}
```

preview code



void testApp::draw() {

```
ofGetWidthCached = ofGetWidth();
ofGetHeightCached = ofGetHeight();
ofBackground(220, 240, 240);
ofSetHexColor(0xFFFFFF);
```

```
if (playIntro) {
  filmpje.draw(0, 0, ofGetWidthCached, ofGetHeightCached);
  return;
}
```

```
if (playCongrat) {
  if (aantalSpelers == 2) {
    filmpje.draw(0, 0, ofGetWidthCached / 2, ofGetHeightCached);
    prent.draw(0, ofGetHeightCached / 4, ofGetWidthCached / 2, ofGetHeightCached / 2);
    filmpje2.draw(ofGetWidthCached / 2, 0, ofGetWidthCached / 2, ofGetHeightCached);
    prent2.draw(ofGetWidthCached / 2, ofGetHeightCached / 4,
ofGetWidthCached / 2, ofGetHeightCached / 2);
  } else {
    filmpje.draw(0, 0, ofGetWidthCached, ofGetHeightCached);
    prent.draw(0, 0, ofGetWidthCached, ofGetHeightCached);
  }
  return;
}
```

```
for (int i = 0; i < circles.size(); i++) {
  circles[i].get()->draw();
}
```

```
ofSetHexColor(0x000000);
string infofr = ofToString(int(ofGetFrameRate()));
```

```
DWORD dw2 = GetTickCount();
float balkLengte = 0;
if ((!wordFound) && (dw2 - speelTijd) < speelLimiet) {
  balkLengte = (float) (speelLimiet -
(dw2 - speelTijd)) / (float) speelLimiet;
}
```

```
ofSetColor(205, 83, 59, 200);
ofDrawRectangle((ofGetWidthCached-100)/2, 10, balkLengte*200, 30);
```

```
box2d.update();
```

```
filmpje.update();
prent.update();
if (aantalSpelers == 2) {
  filmpje2.update();
  prent2.update();
}
```

```
if (ofGetFrameNum() % 5 == 0) {
  kinect.update();
}
```

```
if (kinect.isFrameNew()) {
  grayImage.setFromPixels(kinect.getDepthPixels());
  grayImage.mirror(false, true);
  colorImg.setFromPixels(kinect.getPixels());
  colorImg.mirror(false, true);
}
```

```
unsigned char * pix = grayImage.getPixels().getData();
int numPixels = grayImage.getWidth() * grayImage.getHeight();
for (int i = 0; i < numPixels; i++) {
  if (pix[i] < nearThreshold && pix[i] > farThreshold) {
    pix[i] = 255;
  } else {
    pix[i] = 0;
  }
}
```

```
grayImage.flagImageChanged();
contourFinder.findContours(grayImage, 0, (kinect.width*kinect.height) / 2, 20, false);
}
```

```
ofRemove(circles, removeShapeOffScreen);
}
```