C20 – DESINGING ALGROMITHS

IN CLASS PROJECT

<http://127.0.0.1:5500/p5.play-boilerplate-master/>

var fixedrect;

var movingrect;

function setup() {

  createCanvas(800,400);

  fixedrect = createSprite(250,300,40,30);

  fixedrect.shapeColor = "green";

  movingrect = createSprite(350,400,40,30);

  movingrect.shapeColor = "green";

}

function draw() {

  background(0);

  movingrect.x = mouseX ;

  movingrect.y = mouseY ;

  console.log("x",movingrect.x - fixedrect.x );

  console.log("width",fixedrect.width/2+movingrect.width/2);

  if (movingrect.x - fixedrect.x < fixedrect.width/2 + movingrect.width/2

      && fixedrect.x - movingrect.x < fixedrect.width/2 + movingrect.width/2

      &&movingrect.y - fixedrect.y < fixedrect.height/2 + movingrect.height/2

      && fixedrect.y - movingrect.y < fixedrect.height/2 + movingrect.height/2) {

    fixedrect.shapeColor ="blue";

    movingrect.shapeColor = "blue";

  }else{

    fixedrect.shapeColor ="green";

    movingrect.shapeColor = "green";

  }

  drawSprites();

}

CLASS PROJECT – CAT AND MOUSE

<http://127.0.0.1:5501/tomAndJerryTemplate-master/>

var backgroundImg;

var cat1,cat23,cat4,mouse1,mouse23,mouse4;

var tom,jerry;

function preload() {

    //load the images here

    backgroundImg = loadImage("images/garden.png");

    cat1          = loadAnimation("images/cat1.png");

    cat23         = loadAnimation("images/cat2.png","images/cat3.png");

    cat4          = loadAnimation("images/cat4.png");

    mouse1        = loadAnimation("images/mouse1.png");

    mouse23       = loadAnimation("images/mouse2.png","images/mouse3.png");

    mouse4        = loadAnimation("images/mouse4.png");

}

function setup(){

    createCanvas(1000,800);

    //create tom and jerry sprites here

    tom = createSprite(870,600);

    tom.addAnimation("tom",cat1);

    tom.scale = 0.2;

    jerry = createSprite(200,600);

    jerry.addAnimation("jerry",mouse1);

    jerry.scale = 0.15;

}

function draw() {

    background(backgroundImg);

    //Write condition here to evalute if tom and jerry collide

    if(tom.x - jerry.x < (tom.width - jerry.width)/2 ){

        tom.velocityX = 0;

        tom.addAnimation("tom1",cat4);

        tom.x = 300;

        tom.scale = 0.2;

        tom.changeAnimation("tom1");

        jerry.addAnimation("jerry1",mouse4);

        jerry.scale = 0.15;

        jerry.changeAnimation("jerry1");

    }

    drawSprites();

}

function keyPressed(){

  //For moving and changing animation write code here

   if (keyCode === LEFT\_ARROW) {

       tom.velocityX = -5;

       tom.addAnimation("tomrunning",cat23);

       tom.changeAnimation("tomrunning");

       jerry.frameDelay = 50;

       jerry.addAnimation("jerryteaseing",mouse23);

       jerry.changeAnimation("jerryteaseing",mouse23);

   }

}