|  |
| --- |
| var wall, thickness; |
|  | var bullet,speed, weight; |
|  |  |
|  | function setup() { |
|  | createCanvas(1600, 400); |
|  |  |
|  | speed=random(223,321) |
|  | weight=random(30,52) |
|  |  |
|  |  |
|  | thickness=random(22,83) |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  | bullet=createSprite(50, 200, 50,5); |
|  | bullet.velocityX = speed; |
|  | bullet.shapeColor=color(255); |
|  |  |
|  |  |
|  |  |
|  |  |
|  | wall=createSprite(1200, 200, thickness, height/2); |
|  |  |
|  | wall.shapeColor=color(230,230,230); |
|  | //wall.shapeColor=color(80,80,80) |
|  | } |
|  |  |
|  |  |
|  | function draw() { |
|  | background(0); |
|  | //bullet.sprite.collide(wall.sprite,calculateDeformation) |
|  | if(hasCollided(bullet, wall)) |
|  | { |
|  | bullet.velocityX=0; |
|  | var damage=0.5 \* weight \* speed\* speed/(thickness \*thickness \*thickness); |
|  |  |
|  |  |
|  | if(damage>10) |
|  | { |
|  | wall.shapeColor=color(255,0,0); |
|  |  |
|  | } |
|  |  |
|  |  |
|  |  |
|  | if(damage<10) |
|  | { |
|  | wall.shapeColor=color(0,255,0); |
|  | } |
|  |  |
|  | } |
|  |  |
|  |  |
|  | drawSprites(); |
|  |  |
|  | } |
|  |  |
|  |  |
|  | function hasCollided(lbullet, lwall) |
|  | { |
|  | bulletRightEdge=lbullet.x +lbullet.width; |
|  | wallLeftEdge=lwall.x; |
|  | if (bulletRightEdge>=wallLeftEdge) |
|  | { |
|  | return true |
|  | } |
|  | return false; |
|  | } |
|  |  |