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//Sample Shooting Game
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```
//Mr. H. ;^)
```

```
float    x = 100;  
float    y = 100;  
int      scroll = -200;  
int      score = 0;  
int      lives = 5;  
int      highscore = 0;  
int      stage = 0;  
float    bounce = 4;  
PFont    font;
```

```
void setup() {  
    size(600, 600);  
    background(255);  
    font = createFont("Times", 30, true);  
}
```

```
void draw() {  
    //this section (stage = 0) creates the start page  
    if (stage == 0) {  
        cursor();  
        background(255);  
        fill(255, 0, 0);  
        rect(200, 240, 200, 100);  
        fill(random(255), random(255), random(255));  
        textFont(font, 50);  
        text("Shoot The Target!", 125, 100);  
        fill(0);  
        textFont(font, 25);  
        text("INSTRUCTIONS:", 50, 425);  
        textFont(font, 20);  
        text("Click your mouse to shoot each target and score a point.", 75, 450);  
        text("However should you miss a target and it hits the ground", 75, 475);  
        text("you'll lose a life.", 75, 500);  
        text("The game is over when you run out of lives!", 75, 550);  
        textFont(font, 30);  
        text("Click To Start", 215, 300);  
        if (mousePressed) {  
            if (mouseX >= 200 && mouseX <= 400 && mouseY >= 240 && mouseY <= 340) {  
                stage = stage + 1;  
            }  
        }  
    }  
}
```

```

//this section (stage = 1) creates the game page
if (stage == 1) {
  background(255);
  fill(0);
  textFont(font, 20);
  text("Score = ", 10, 20);
  text(score, 100, 20);
  text("Lives = ", 10, 40);
  text(lives, 100, 40);
  text("High Score = ", 430, 20);
  text(highscore, 560, 20);
  noCursor();

  //this section creates the falling target to shoot on the game page
  fill(0, 0, 255);
  stroke(255, 0, 0);
  ellipse(x, y, 25, 25);

  //this section draws the target crosshairs
  noFill();
  ellipse(mouseX, mouseY, 10, 10);
  ellipse(mouseX, mouseY, 20, 20);
  ellipse(mouseX, mouseY, 30, 30);
  line(mouseX, mouseY+30, mouseX, mouseY-30);
  line(mouseX+30, mouseY, mouseX-30, mouseY);

  //this section moves the ball down the page and then back to the top on th
  y = y + 2 + score/10;
  if (y >= 650) {
    y = 0;
    x = random(600);
    lives = lives - 1;

    //this section creates the crosshairs target on the game page
    //this keeps track of your lives
    if (lives <= 0) {
      stage = 2;
    }
  }
}

```

```

//this section is for shooting the target and tracking number of hits for
if (mousePressed) {
  if (mouseX >= x-10 && mouseX <= x+10 && mouseY >= y-10 && mouseY <= y+10)
  {
    background(0);
    score = score + 1;
    y = 0;
    x = random(600);
    bounce = random(16)-8;
  }
}
}

```

```

//this section adds a sideways motion to the ball
if (score >= 50) {
  x = x + bounce;
}
if (x >= 610) {
  bounce = bounce * -1;
}
if (x <= -10) {
  bounce = bounce * -1;
}

```

```

//this section creates the game over page and "scroll" moves the text across
if (stage >= 2) {
  cursor();
  background(255);
  fill(0);
  textFont(font, 20);
  text("High Score = ", 430, 20);
  text(highscore, 560, 20);
  textFont(font, 40);
  fill(255, 0, 0);
  text("Game Over", scroll, 500);
  scroll = scroll + 1;
  if (scroll >= 700) {
    scroll = -200;
  }

  rect(200, 240, 200, 100);
  stroke(0);
  fill(random(255), random(255), random(255));
  textFont(font, 50);
  text("Shoot The Target!", 125, 100);
}

```

```
fill(0);
textFont(font, 30);
if (score >= highscore) {
  highscore = score;
}
text("Click To Start", 215, 300);
if (mousePressed) {
  if (mouseX >= 200 && mouseX <= 400 && mouseY >= 240 && mouseY <= 340) {
    stage = 1;
    score = 0;
    lives = 5;
  }
}
}
```