

draw()

A function that's called repeatedly while the sketch runs.

Declaring the function `draw()` sets a code block to run repeatedly once the sketch starts. It's used to create animations and respond to user inputs:

```
function draw() {
  // Code to run repeatedly.
}
```

This is often called the "draw loop" because p5.js calls the code in `draw()` in a loop behind the scenes. By default, `draw()` tries to run 60 times per second. The actual rate depends on many factors. The drawing rate, called the "frame rate", can be controlled by calling `frameRate()`. The number of times `draw()` has run is stored in the system variable `frameCount()`.

Code placed within `draw()` begins looping after `setup()` runs. `draw()` will run until the user closes the sketch. `draw()` can be stopped by calling the `noLoop()` function. `draw()` can be resumed by calling the `loop()` function.

Examples



```
function setup() {
  createCanvas(100, 100);

  // Paint the background once.
  background(200);

  describe(
    'A white circle on a gray background. The circle follows
    the mouse as the user moves, leaving a trail.'
  );
}

function draw() {
  // Draw circles repeatedly.
  circle(mouseX, mouseY, 40);
}
```



```
function setup() {
  createCanvas(100, 100);

  describe(
    'A white circle on a gray background. The circle follows
    the mouse as the user moves.'
  );

  function draw() {
    // Paint the background repeatedly.
    background(200);

    // Draw circles repeatedly.
    circle(mouseX, mouseY, 40);
  }
}
```



```
// Double-click the canvas to change the circle's color.

function setup() {
  createCanvas(100, 100);

  describe(
    'A white circle on a gray background. The circle follows
    the mouse as the user moves. The circle changes color to pink
    when the user double-clicks.'
  );
}

function draw() {
  // Paint the background repeatedly.
  background(200);

  // Draw circles repeatedly.
  circle(mouseX, mouseY, 40);
}

// Change the fill color when the user double-clicks.
function doubleClicked() {
  fill('deeppink');
}
```

This page is generated from the comments in `src/core/main.js`. Please feel free to edit it and submit a pull request!

Related References

`disableFriendlyErrors`
Turns off the parts of the Friendly Error System (FES) that impact performance.

`draw`
A function that's called repeatedly while the sketch runs.

`isLooping`
Returns true if the draw loop is running and false if not.

`loop`
Resumes the draw loop after `noLoop()` has been called.

