

# touchStarted()

A function that's called once each time the user touches the screen.

Declaring a function called `touchStarted()` sets a code block to run automatically each time the user begins touching a touchscreen device:

```
function touchStarted() {
  // Code to run.
}
```

The `touches` array will be updated with the most recent touch points when `touchStarted()` is called by p5.js:

```
function touchStarted() {
  // Paint over the background.
  background(200);

  // Mark each touch point once with a circle.
  for (let touch of touches) {
    circle(touch.x, touch.y, 40);
  }
}
```

The parameter, `event`, is optional. `touchStarted()` will be passed a `TouchEvent` object with properties that describe the touch event:

```
function touchStarted(event) {
  // Code to run that uses the event.
  console.log(event);
}
```

On touchscreen devices, `mousePressed()` will run when a user's touch starts if `touchStarted()` isn't declared. If `touchStarted()` is declared, then `touchStarted()` will run when a user's touch starts and `mousePressed()` won't.

Note: `touchStarted()`, `touchEnded()`, and `touchMoved()` are all related.  
`touchStarted()` runs as soon as the user touches a touchscreen device.  
`touchEnded()` runs as soon as the user ends a touch. `touchMoved()` runs repeatedly as the user moves any touch points.

## Examples

```
// On a touchscreen device, touch the canvas using one or
// fingers
// at the same time.
```

```
let value = 0;

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

  describe(
    'A gray square with a black square at its center. The
    inner square switches color between black and white each time
    the user touches the screen.'
  );
}

function draw() {
  background(200);

  // Style the square.
  fill(value);

  // Draw the square.
  square(25, 25, 50);
}

// Toggle colors with each touch.
function touchStarted() {
  if (value === 0) {
    value = 255;
  } else {
    value = 0;
  }
}
```

```
// On a touchscreen device, touch the canvas using one or
// fingers
// at the same time.
```

```
let bgColor = 50;
let fillColor = 255;
let borderWidth = 0.5;

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

  describe(
    'A gray square with the number 0 at the top-center. The
    number tracks the number of places the user is touching the
    screen. Circles appear at each touch point and change style in
    response to events.'
  );
}

function draw() {
  background(bgColor);

  // Style the text.
  textAlign(CENTER);
  textSize(16);
  fill(0);
  noStroke();

  // Display the number of touch points.
  text(touches.length, 50, 20);

  // Style the touch points.
```

## Syntax

```
touchStarted([event])
```



[View on GitHub](#)

[Edit on GitHub](#)

[Report a Bug](#)

[Suggest a Feature](#)

[Ask a Question](#)

[Get Help](#)

[Join the Community](#)

[Join the Mailing List](#)

[Join the Slack Channel](#)

[Join the Discord Server](#)

[Join the YouTube Channel](#)

[Join the Instagram Account](#)

[Join the X Account](#)

[Join the GitHub Repository](#)

[Join the Privacy Policy](#)

[Join the Terms of Use](#)

[Join the Contact Information](#)

[Join the Copyright Information](#)

[Join the Download Information](#)

[Join the Information](#)

[Join the Resources](#)

[Join the Reference](#)

[Join the Tutorials](#)

[Join the Examples](#)

[Join the Contribute](#)

[Join the Community](#)

[Join the About](#)

[Join the Start Coding](#)

[Join the Donate](#)

[Join the GitHub](#)

[Join the Instagram](#)

[Join the X](#)

[Join the YouTube](#)

[Join the Discord](#)

[Join the Forum](#)

[Join the License](#)

[Join the Attribution](#)

[Join the Attribution</](#)