

# 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])
```

## Parameters

`event`      `TouchEvent`: optional `TouchEvent` argument.

This page is generated from the comments in [src/events/touch.js](#). Please feel free to edit it and submit a pull request!

## Related References

<b>touchEnded</b> A function that's called once each time a screen touch ends.	<b>touchMoved</b> A function that's called when the user touches the screen and moves.	<b>touchStarted</b> A function that's called once each time the user touches the screen.	<b>touches</b> An Array of all the current touch points on a touchscreen device.
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