

# 06

# GUI Elements

Graphical User Interface

# GUI

The graphical user interface, or GUI is a form of user interface that allows users to interact with electronic devices through icons, or other graphical elements.

```
let button;
```

```
button = createButton('Click me');
```

```
button.mousePressed(myFunction);
```

```
function buttonPressed() {  
    print('Button clicked!');  
}
```

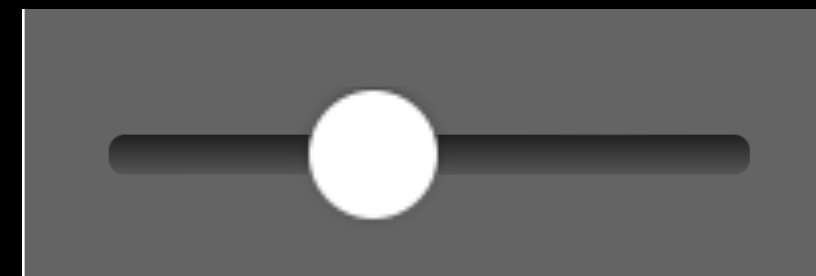
A rectangular button with rounded corners and a light gray background. The text "click me" is written in a bold, black, sans-serif font in the center of the button. The button is set against a dark gray background.

```
let slider;
```

```
slider = createSlider(0, 100, 50);
```

```
let sliderValue = slider.value();
```

```
text(sliderValue, 10, 20);
```

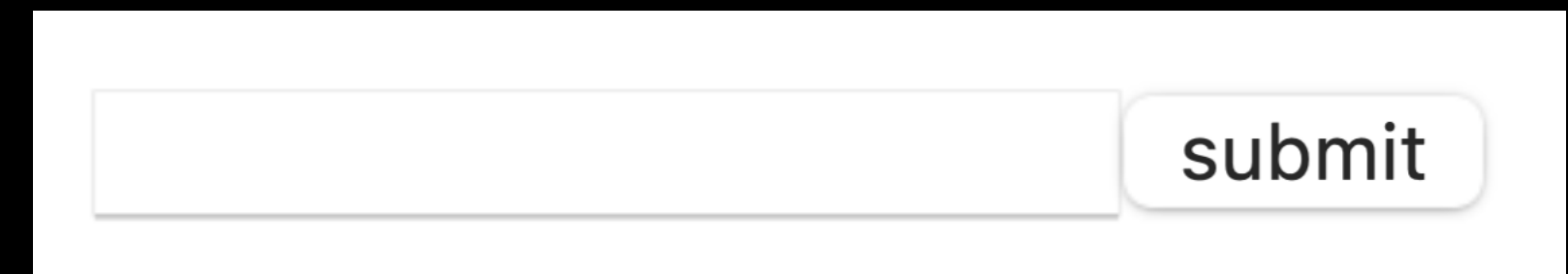


```
let textInput;
```

```
input = createInput('Enter text');
```

```
let myInputValue = input.value();
```

```
text(myInputValue);
```

A visual representation of a text input field and a submit button. The input field is a white rectangle with a thin gray border. To its right is a rounded rectangular button with a light gray background and the word "submit" in a dark gray sans-serif font.

# Custom GUI

In p5.js you can create your own GUI elements using any of the elements we have used so far (text, shapes, images).

In order to do that, we need to monitor the current position of the mouse to check if the pointer is currently inside or outside of the GUI element.

```
ellipse(width / 2, height / 2, circleRadius*2);
```

```
function mousePressed() {  
  let d = dist(mouseX, mouseY, width / 2, height / 2);  
  if (d < circleRadius) {  
    do something();  
  }  
}
```

