

<input type="number">

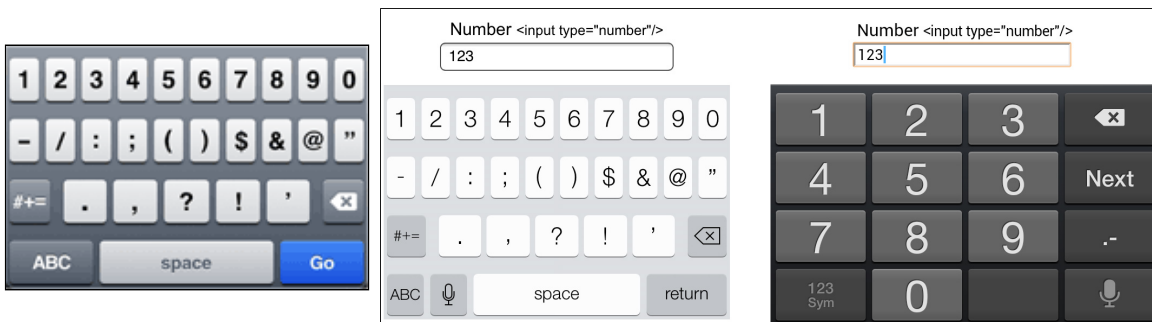
This input field is useful for entering numerical values (integer or float), but not for entering zip codes. On desktop implementations and on some mobile implementations, it provides a user interface with small vertical arrows for incrementing/decrementing the current value, while on mobiles it will display a numeric keyboard.



For zip codes, a `<input type="text" pattern=".....">` is preferable. See examples given in the `pattern` attribute section of this course.

Example: `<input type="number" value="25" min="0" step="5" max="500"/>`

Screenshot examples taken with mobile devices (left: IOS, right: Android)



Examples on desktop (the width will be adjusted depending on the `min` and `max` attributes):

Quantity (between 1 and 5):

Quantity (between 1 and 5):

TYPICAL USAGE

`<input type="number" value="25" min="0" step="5" max="500"/>`

This field accepts specific attributes `max`, `min`, `step`, `value`(default displayed value).

This input type is very interesting as it provides default validation behaviors:

- If the value entered using a keyboard is not a valid number, or is not in the range defined by the `min` and `max` attributes, the field is *invalid* and gets the pseudo CSS class `:invalid`,
- If the value is a number and is between `min` and `max` and multiple of `step`, then it gets the CSS pseudo class `:valid`

WARNING: Using a `step` attribute with an integer value will make the arrows increment/decrement the current value with the `step` value, and make the input field valid only when multiples of the step value are entered. By default, omitting the `step` attribute is equivalent to `step="1"`, so for entering float values, it is necessary to use `step="any"`.

[Online example at JS Bin](#): (try changing the attribute values, use `step="any"` and try float values, etc).

Or, do it here in your browser (enter manually a value that is not in the range, or not a multiple of 5, try the up and down arrows, etc.):

Quantity (between 1 and 500, should be a multiple of 5 otherwise it's invalid):

Source code:

```
<!DOCTYPE html>
<html>
<head>
<style>
  #number:invalid {
    background-color:pink;
  }
  #number:valid {
    background-color:lightGreen;
  }
</style>
</head>
<body>
```

Example of `<input type=number>`:<p>

`<label for="number">`Quantity (between 1 and 500, should be a multiple of 5 otherwise it's invalid):`</label>`

`<input type="number" id="number" value="25" min="0" step="5" max="500"/>`
`<p>`

Change the different values for attributes step, max, min, value, don't forget to try step="any" for float values...

`</body>`

`</html>`

SOURCE CODE FOR THE KNOWLEDGE CHECK

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="utf-8">
```

```
<title>Example type=number</title>
```

```
<style>
```

```
  #myField:valid {
```

```
    background-color:lightGreen;
```

```
  }
```

```
10.  #myField:invalid {
```

```
    background-color:pink;
```

```
  }
```

```
</style>
```

```
</head>
```

```
<body>
```

```
  <label for="myField">Please enter a number between 0 and 30: </label>
```

```
  <input type="number" id="myField" min="0" step="5" max="30"/>
```

```
</body>
```

```
19. </html>
```

KNOWLEDGE CHECK 5.4.5 (NOT GRADED)

Suppose we enter the value 17 in the input field defined by the above code. What will be the background color?

☐ pink

☐ lightGreen

☐ red