

jQuery Animations - The animate() Method

The jQuery `animate()` method is used to create custom animations.

Syntax:

```
$(selector).animate({params}, speed, callback);
```

The required `params` parameter defines the CSS properties to be animated.

The optional `speed` parameter specifies the duration of the effect. It can take the following values: "slow", "fast", or milliseconds.

The optional `callback` parameter is a function to be executed after the animation completes.

The following example demonstrates a simple use of the `animate()` method; it moves a `<div>` element to the right, until it has reached a left property of 250px:

Example :-

```
<!DOCTYPE html>

<html>

<head>

<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.7.1/jquery.min.js"></script>

<script>

$(document).ready(function(){

    $("button").click(function(){

        $("div").animate({left: '250px'});

    });

});

</script>

</head>
```

```
<body>
```

```
<button>Start Animation</button>
```

<p>By default, all HTML elements have a static position, and cannot be moved. To manipulate the position, remember to first set the CSS position property of the element to relative, fixed, or absolute!</p>

```
<div style="background:#98bf21;height:100px;width:100px;position:absolute;"></div>
```

```
</body>
```

```
</html>
```

jQuery animate() - Manipulate Multiple Properties

Notice that multiple properties can be animated at the same time:

Example

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.7.1/jquery.min.js"></script>
```

```
<script>
```

```
$(document).ready(function(){
```

```
$("#button").click(function(){
```

```
  $("#div").animate({
```

```
    left: '250px',
```

```
    opacity: '0.5',
```

```
    height: '150px',
```

```
    width: '150px'
```

```
  });
```

```
});
```

```
});
```

```
</script>
```

```
</head>
```

```
<body>
```

```
<button>Start Animation</button>
```

<p>By default, all HTML elements have a static position, and cannot be moved. To manipulate the position, remember to first set the CSS position property of the element to relative, fixed, or absolute!</p>

```
<div style="background:#98bf21;height:100px;width:100px;position:absolute;"></div>
```

```
</body>
```

```
</html>
```

jQuery animate() - Using Pre-defined Values

You can even specify a property's animation value as "show", "hide", or "toggle":

```
<!DOCTYPE html>

<html>

<head>

<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.7.1/jquery.min.js"></script>

<script>

$(document).ready(function(){

  $("button").click(function(){

    $("div").animate({

      height: 'toggle'

    });

  });

});

</script>

</head>

<body>
```

```
<p>Click the button multiple times to toggle the animation.</p>
```

```
<button>Start Animation</button>
```

```
<p>By default, all HTML elements have a static position, and cannot be moved. To manipulate the position, remember to first set the CSS position property of the element to relative, fixed, or absolute!</p>
```

```
<div style="background:#98bf21;height:100px;width:100px;position:absolute;"></div>
```

```
</body>
```

```
</html>
```

jQuery animate() - Uses Queue Functionality

By default, jQuery comes with queue functionality for animations.

This means that if you write multiple `animate()` calls after each other, jQuery creates an "internal" queue with these method calls. Then it runs the animate calls ONE by ONE.

So, if you want to perform different animations after each other, we take advantage of the queue functionality:

Example :-

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.7.1/jquery.min.js"></script>
```

```
<script>
```

```
$(document).ready(function(){
```

```
    $("button").click(function(){
```

```
        var div = $("div");
```

```
        div.animate({height: '300px', opacity: '0.4'}, "slow");
```

```
        div.animate({width: '300px', opacity: '0.8'}, "slow");
```

```
        div.animate({height: '100px', opacity: '0.4'}, "slow");
```

```
        div.animate({width: '100px', opacity: '0.8'}, "slow");
```

```
    });
```

```
}
```

```
</script>
```

```
</head>
```

```
<body>
```

```
<button>Start Animation</button>
```

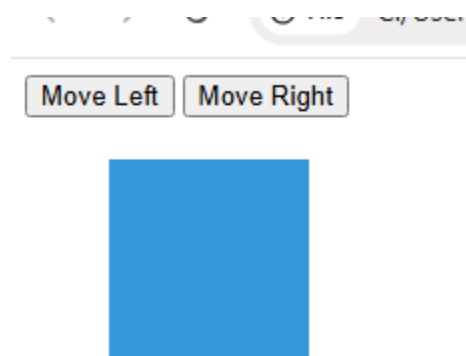
<p>By default, all HTML elements have a static position, and cannot be moved. To manipulate the position, remember to first set the CSS position property of the element to relative, fixed, or absolute!</p>

```
<div style="background:#98bf21;height:100px;width:100px;position:absolute;"></div>
```

```
</body>
```

```
</html>
```

Left and Right animation example on Click :-



```
<!DOCTYPE html>
```

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

```
<head>
```

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

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>jQuery Left and Right Animation</title>

<script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>

<style>

#box {

width: 100px;

height: 100px;

background-color: #3498db;

position: absolute;

left: 50px; /* Starting position */

top:50px;

}

</style>

</head>

<body>

<div id="box"></div>

<button id="moveLeft">Move Left</button>

<button id="moveRight">Move Right</button>

<script>

$(document).ready(function() {

$('#moveLeft').click(function() {

// Animate box to move left 100px
```

```
$('#box').animate({ left: '-=100px' }, 500); // 500ms to move 100px left
```

```
});
```

```
$('#moveRight').click(function() {
```

```
    // Animate box to move right 100px
```

```
    $('#box').animate({ left: '+=100px' }, 500); // 500ms to move 100px right
```

```
});
```

```
});
```

```
</script>
```

```
</body>
```

```
</html>
```

Example 2 :-

```
<!DOCTYPE html>
```

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

```
<head>
```

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

```
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
    <title>jQuery Left and Right Animation Example</title>
```

```
    <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
```

```
    <style>
```

```
        #box {
```

```
            width: 100px;
```

```
            height: 100px;
```

```
background-color: #3498db;

position: absolute;

left: 50px; /* Starting position */

    top:50px;

}

</style>

</head>

<body>

<div id="box"></div>

<button id="startBtn">Start Animation</button>

<script>

$(document).ready(function() {

    $('#startBtn').click(function() {

        $('#box')

            .animate({ left: '+=300px' }, 1000) // Move right 300px in 1 second

            .animate({ left: '-=300px' }, 1000); // Move left 300px in 1 second

    });

});

</script>

</body>

</html>
```