

Module : 7 JQuery Basic, Effects & Advanced

1. What is jQuery?

jQuery is a lightweight, "write less, do more", JavaScript library.

The purpose of jQuery is to make it much easier to use JavaScript on your website.

jQuery takes a lot of common tasks that require many lines of JavaScript code to accomplish, and wraps them into methods that you can call with a single line of code.

jQuery also simplifies a lot of the complicated things from JavaScript, like AJAX calls and DOM manipulation.

The jQuery library contains the following features:

- HTML/DOM manipulation
- CSS manipulation
- HTML event methods
- Effects and animations
- AJAX
- Utilities

2. How to Apply CSS Using JQuery, How to Add Class and Remove Class in JQuery, JQuery Animation?

We are going to use jQuery and jQuery UI. jQuery UI (User Interface) is free and open-source software that is built on top of the core powerful jQuery library. If you want to use jQuery UI, you must include jQuery too. jQuery UI provides more features like add Class, color animation and easing, etc.

We are going to use some jQuery

UI [addClass\(\)](#) and [removeClass\(\)](#) methods.

- **addClass() method:** It is used to add specified classes to each of the targeted elements while animating all style changes.

Syntax:

```
.addClass(className, [duration], [easing],  
[callback])
```

- **removeClass() method:** It is used to remove the classes from the element while animating all style changes.

Syntax:

```
.removeClass(className, [duration], [easing],  
[callback])
```

```
<!DOCTYPE html>  
<html>  
<head>  
<script  
src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.4  
/jquery.min.js"> </script>  
<script>  
$(document).ready(function(){  
    $("button").click(function(){  
        $("h1, h2, p").addClass("blue");  
        $("div").addClass("important");  
    });  
});  
</script>
```

```
<style>
.important {
  font-weight: bold;
  font-size: xx-large;
}

.blue {
  color: blue;
}
</style>
</head>
<body>
```

3. How to create slider with animation?

The jQuery slide methods slide elements up and down.

jQuery Sliding Methods

With jQuery you can create a sliding effect on elements.

jQuery has the following slide methods:

- `slideDown()`
- `slideUp()`
- `slideToggle()`

jQuery slideDown() Method

The jQuery `slideDown()` method is used to slide down an element.

Syntax:

```
$(selector).slideDown(speed,callback);
```

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 sliding completes.

The following example demonstrates the `slideDown()` method:

```
<script>
$(document).ready(function(){
  $("#flip").click(function(){
    $("#panel").slideDown("slow");
  });
});
</script>
<style>
#panel, #flip {
  padding: 5px;
  text-align: center;
  background-color: #e5eccc;
  border: solid 1px #c3c3c3;
}

#panel {
```

```
padding: 50px;
display: none;
}
</style>
```

jQuery slideUp() Method

The jQuery `slideUp()` method is used to slide up an element.

Syntax:

```
$(selector).slideUp(speed,callback);
```

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 sliding completes.

```
$("#flip").click(function(){
    $("#panel").slideUp();
});
```

The jQuery `slideToggle()` method toggles between the `slideDown()` and `slideUp()` methods.

If the elements have been slid down, `slideToggle()` will slide them up.

If the elements have been slid up, `slideToggle()` will slide them down.

```
$(selector).slideToggle(speed,callback);
```

The optional speed parameter can take the following values: "slow", "fast", milliseconds.

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

The following example demonstrates the `slideToggle()` method:

```
$("#flip").click(function(){  
    $("#panel").slideToggle();  
});
```