**JQuery**

JQuery is a light weight JavaScript library

JQuery biggest feature is write less and do more.

For most of the common task of java script may require more number of lines of code, in jQuery , all those tasks all those tasks are wrapped into methods and we can call those methods using JQuery . This reduces the number of lines of code.

JQuery simplifies the complicated things done by java script like ajax calls and dom manipulation.

**Features of JQuery**

By using jQuery we can perform html dom manipulation in easy way with less number of lines of code.

Using JQuery we can even perform css manipulation , which means , by using JQuery , we can apply all the css styles for any html elements in easy way than java script.

By using JQuery , we can perform the java script event handling with less number of lines of code.

By using JQuery, we can even add special effects ,and animations for any HTML elements

JQuery is also having lot of plugins for most of the complicated tasks which can be done in Java script like , slider , or carosel, login model , and some animation effects .

The JQuery code works perfectly in all the modern browsers

**Link JQuery to any website**

In order to link the JQuery to any website we need to add a single JQuery.js for any html document

Normally JQuery comes along with 2 versions such as

* Production version
* Development version

The production version of JQuery is a minified version or compressed version .

Ex:JQuery<version>.min.js

The compressed version is not human readable code.It occupies less memory in size . We normally use this for production deployment .

The development version is a non minified version or uncompressed version

Ex : JQuery<version>.JS.

The is a human readable code . We normally use this for development purpose .

In order to link JQuery to any html document we can use a serial link of google or Microsoft or an offline version of JQuery .

In offline version , we download the java script file and store it in any local folder and give connection from that local folder

In this , we do offline coding . not online coding

**JQuery Syntax**

$(Selector).action();

* $ sign denotes JQuery function
* . is separator
* Selector is select th HTML element
* Action is to perform action on selected element

In JQuery , we select each HTML element and perform some action on that HTML element

While selecting and html elements we can use all the following JQuery selectors

**JQuery Selectors**

* Element Selector $(‘p’)
* ID Selector $(‘#main -nav’)
* Class selector $(‘.container ’)
* Attribute selector $(“input[type=’text’]”)
* Pseudo selector

Examples :

* $(this).hide(); //hides the current element
* $(“p”).hide(); //hides all <p> elements .
* $(‘#mycard’).toggles(‘slow’); // toggles the element
* $(“.container”).hide ();//hides all the elements with class=”container ”
* $(“#test”).hide();//hides element with id=”test”

**JavaScript render Blocking:**

JavaScript is used to change the html elements and css properties .

While rendering the html page or while displaying the html page whenever the bowser encounters any script tag with java script file then , it stops the rendering the process of the html page until the java script file is completely downloaded and executed . This process is called as JavaScript Render Blocking.

If any problem or error in the java script file then, then rendering of the page will not happen until and unless we fix the error in java script file .This slows down the page performance .

We use java script to link with html in 3 ways :

**Way 1 (right away loading)**

In this process we link js to html document for this we use to write the script tag in the head section.

Example :

<head>

<Script src=”app.js”></script>

</head>

Html parsing

Js download

Js execution

Html parsing starts, js file found in head does js download js execution if any error found stops remaining html rendering doesn’t happen .

**Loading Java Script in Asynchronous mode**

<head>

<Script src=”app.js” async></script>

</head>

We can load JS to html in asynchronous mode just by adding async

Word to the script tag .

If we load the java script in any html document in asynchronous mode , then the html parsing and js download will happen simultaneously and then it stops html rendering process and execute the java script and if everything is success it starts the remaining html parsing .

**Loading java script in defer mode**

<head>

<Script src=”app.js” async></script>

</head>

We can load java script in defer modr to any html document just by adding the differ keyword

To the script tag

In differed mode , the complete html parsing and the java script download will happen simultaneously once the complete html parsing is done then it starts actual java script execution.

**Best way is …**

. Add script tag at end of body section without any attributes without any special attributes or add a script tag in the head section with defer attribute.

Not: This process clearly indicates that we have to execute the java script code once the html document is fully loaded already .

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