**jQuery**

**Q1) What is jQuery?**

jQuery is a fast, lightweight, feature-rich client-side JavaScript library. It is cross-platform and supports different types of browsers. It has provided a much-needed boost to JavaScript. Before jQuery, JavaScript codes were lengthy and bigger, even for smaller functions. It makes a website more interactive and attractive.

**Q2) Is jQuery a programming language?**

jQuery is not a programming language but a well-written JavaScript code. It is used to traverse documents, event handling, Ajax interaction, and Animation.

**Q3) What is the difference between JavaScript and jQuery?**

The simple difference is that JavaScript is a language while jQuery is a built-in library built for JavaScript. jQuery simplifies the use of JavaScript language**.**

**Q4) Why do we use jQuery?**

* It is very easy to learn and use.
* It is used to develop browser compatible web applications.
* It improves the performance of an application.
* It is very fast and extensible.
* It facilitates you to write minimal lines of codes for UI related functions.
* It provides cross-browser support.

**Q5) Is jQuery replacement of JavaScript?**

No, jQuery is not the replacement of JavaScript. jQuery is written on the top of JavaScript, and it is a different library. jQuery is a lightweight JavaScript library which is used to interact with JavaScript and HTML.

**Q6) What is $() in jQuery library?**

The $() function is an alias of jQuery() function. It is used to wrap any object into jQuery object which later facilitates you to call the various method defined jQuery object. You can pass a selector string to $() function, and it returns a jQuery object which contains an array of all matched DOM elements.

*Syntax:*

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

*$("p").css("background-color", "pink");*

*});*

**Q7) What are the effects methods used in jQuery?**

These are some effects methods used in jQuery:

* show() - It displays or shows the selected elements.
* hide() - It hides the matched or selected elements.
* toggle() - It shows or hides the matched elements. In other words, it toggles between the hide() and shows() methods.
* fadeIn() - It shows the matched elements by fading it to opaque. In other words, it fades in the selected elements.
* fadeOut() - It shows the matched elements by fading it to transparent. In other words, it fades out the selected elements.

**Q9) Is it possible that jQuery HTML work for both HTML and XML document?**

No, jQuery HTML only works for HTML document. It doesn't work for XML documents.

**Q10)What are the advantages of jQuery?**

* Most popular and open source
* Very fast and easily extensible
* Used to develop cross browser compatible web applications as jQuery works in almost the same manner for different kinds of browsers.
* Improves the performance of an application when using the minimised version of the jQuery library. The size of the minimized js file is almost 50% less than the normal js file. Reduction in the file size makes the web page load and work faster.
* Commonly implemented UI related functionalities are written using minimal lines of codes

**Q11) Is jQuery a JavaScript or JSON library file?**

jQuery is said to be a library of single JavaScript file which consists of DOM/CSS manipulations, event effects or animations, AJAX functions and various commonly used plugins.

**Q12). What is the difference between javascript and jquery?**

JavaScript is an interpreted language written in C and is combination of ECMAScript and DOM where jQuery is a JavaScript library developed to run things faster and make things simplified for JavaScript. jQuery doesnt have the ECMAScript.

JavaScript requires long lines of code to code a functionality where in case of jQuery, just import the library and call the functions which would reduce the programmer’s effort of coding.

JavaScript doesnt have the cross browser compatible functionality which is why a developer has to write code manually to implement the functionality. Whereas the cross browser code compatibility is inbuilt in jQuery.

**Q13) What are the selectors in jQuery? How many types of selectors in jQuery?**

In order to work with any element on the web page, we would first need to find it. Selectors find the HTML elements in jQuery. Some of the most commonly used and basic selectors are:

* Name: Used to select all elements which matches the given element Name.
* #ID: Used to select a single element which matches with the given ID
* .Class: Used to select all elements which match with the given Class.
* Universal (\*): Used to select all elements available in a DOM.
* Multiple Elements E, F, G: Used to selects the combined results of all the specified selectors E, F or G.
* Attribute Selector: Used to select elements based on its attribute value.

**Q14) What is the use of val() method in JQuery?**

The jQuery val() method is used:

To get the current value of the first element in the set of matched elements.

To set the value of every matched element.

**Q15) What are the features of jQuery?**

**Answer:** Some important features of jQuery are:

* Easy DOM manipulation using the Sizzle engine.
* Event handling & AJAX support.
* Built-in effects and animations.
* Lightweight library.
* Cross-browser compatibility.
* Supports CSS3, basic XPath, HTML5.

**Q17) What is the difference between prop and attr?**

* attr(): It gets the value of an attribute for the first element in the set of matched element.
* prop(): it gets the value of a property for the first element in the set of matched elements. It is introduced in jQuery 1.6.

**Q18) Explain the Advantages of jQuery?**

**Answer:** The advantages of jQuery are:

* Simple and easy to use.
* Has extensive documentation in the form of blogs, code snippets, tutorials, and other resources
* Simple and clean syntax.
* Open coding standards, intuitive.
* Deals with cross-browser issues without the developer having to worry about them.
* Lightweight with the core library being just 24kb.
* Open-source library.
* Exhaustive set of animations and effects.
* Extensible and fast.
* It can be optimized for search engines for better SEO.

**Q19) What is jQuery Ajax?**

**Answer**: AJAX is an acronym standing for Asynchronous JavaScript and XML, and this technology helps us load data and exchange data with the server without a browser page refresh. JQuery is a great tool that provides a rich set of AJAX methods to develop next-generation web applications.

**Q20)Difference between .empty(), .remove() and, .detach() in Jquery ?**

* jQuery empty() Method: The empty() method in jQuery is used to remove all child nodes and its content for the selected elements.
* jQuery remove() Method: The remove() method in JQuery is used to remove all the selected elements including all the text. This method also remove data and all the events of the selected elements.
* jQuery detach() Method: The detach() method in jQuery is used to remove the selected elements from the DOM tree including its all text and child nodes but it keeps the data and the events. Document Object Model (DOM) is a World Wide Web Consortium standard. This defines for accessing elements in the DOM tree.

Note: The remove() method is faster than empty() or detach() method.

**Q21). Mention the Differences between JavaScript and jQuery.**

|  |  |
| --- | --- |
| **JavaScript** | **jQuery** |
| It is a weakly typed, dynamic programming language | jQuery is a Concise and fast JavaScript library |
| It is an interpreted language | It uses resources of JavaScript to make tasks simpler and easier |
| You need to write your own script and it can be a time-consuming process | You only have to write existing JQuery scripts so it saves time |
| Don’t need to add any additional plugins as all browsers support JavaScript | You may have to include jQuery library URL in the header of the page |
| Too many lines of Code | Fewer lines of Code |

**Q22)In what scenarios jQuery can be used ?**  
jQuery can be used in following scenarios:

* Mainly for Animation effects
* Manipulation purpose
* Calling functions on events
* Apply CSS static or dynamic

**Q23) What are Selectors in jQuery?**

A jQuery **Selector** is a function that uses the expressions to find out **matching elements** from a **DOM** based on the given criteria. In a simple language, selectors are used to select one or more HTML elements using jQuery. Once an element is selected then we can perform various operations on that selected element.

Selecting an element in DOM is done with the help of **$()** construct with a string parameter containing any **CSS** selector expression. $() will return zero or more DOM elements on which you can apply any effect or style.

**Q24. What are the different types of Selectors?**

There are three main types of selectors used in jQuery:

|  |  |  |
| --- | --- | --- |
| **Selector** | **jQuery Syntax** | **Description** |
| **Tag Name** | $(‘div’) | All div tags in the document |
| **ID** | $(‘#TextId’) | Selects element with ID as TextId. |
| **Class** | $(‘.myclass’) | Selects all elements with class as myclass. |