

Lecture Topics → Math Functions  
② Asynchronous programming  
③ Ajax (Technology)  
↳ \* callbacks

21.8.22

In Ajax [ XMLHttpRequest → object  
XMLHttpRequest function called  
↳ having open() & send() ]

Topic :- Math Functions :-

Math functions in javascript allows us to include math functions in the document. There are many functions related to Math object, which is static.

Math property Syntax &

Math property  
Some Math properties are &

- 1) Math.E
- 2) Math.SQRT2
- 3) Math.PI
- 4) Math.PN10

And many more functions which are useful in functioning in javascript.

- \* Math.min
- \* Math.max
- \* Math.sqrt
- \* Math.abs
- \* Math.pow

Math Functions

## Topic :- Synchronous and Asynchronous programming :-

- \* Synchronous programming :- one task will be completed, then only other task will be started. Means when you call a function that performs a long running action, it returns only when the action has been finished and it can return the result.
- \* Asynchronous programming :- It allows the multiple thing to happen at the same time. Means all the tasks can be continued simultaneously and results obtained. For example when the program retrieves the data from the remote server, it can continue to execute other tasks such as responding to three users.

## Topic :- Ajax (Asynchronous Javascript XML)

Group of interrelated web development technologies for creating interactive web applications.

- \* Ajax uses the XMLHttpRequest object to send data to the web server and XML is commonly used as the format for receiving data.

\* Ajax uses the combination of →

- 1) XMLHttpRequest object
- 2) Javascript and HTML DOM (for displaying the data).

\* XMLHttpRequest → created by the Javascript

\* It sends a request to the web server and the server processes the request.

\* Ajax functioning of the application contains all the useful information

[variable = new XMLHttpRequest();]

Syntax for creating XMLHttpRequest

There are ② methods used with the XMLHttpRequest, which was previously used as the ActiveXObject.

So, Methods are

```
XMLHttpRequest.open("GET", "ajax-info.txt", true);
XMLHttpRequest.send();
```

open() & send() Methods



## Topic: Callback Functions

They are used to handle the responses from the ajax

- A callback function can either be
- ⇒ named function
  - ⇒ anonymous function

It is the function which is passed as an argument to other one

Callbacks function:-

```
funcA = (name, arg2) {  
    document.write (' hey ${name}');  
    arg2();  
}
```

```
funcB = () => {  
    document.write (" hey a");  
}
```

```
funcA("preenu", funcB)
```