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2. HTTP Module in NodeJs

Consider modules to be the same as JavaScript libraries. A set of functions you want to include in your application.

Node.js has a set of built-in modules which you can use without any further installation.

How to Include Module in your project ?

To include a module, use the `require()` function with the name of the module:

```
var http = require('http');
```

Now your application has access to the HTTP module, and is able to create a server:

```
http.createServer(function (req, res) {  
  res.writeHead(200, {'Content-Type': 'text/html'});  
  res.end('Hello World!');  
}).listen(8080);
```

In the above example we are saying node.js that http module is our requirement so nodes will import all the files of http module in your project so that you can use it.

In simple language whenever you wanted to use any extra module you have to first tell the node that you wanted to use it with the help of `require(module_name)`.

HTTP Module

Node.js has a built-in module called HTTP, which allows Node.js to transfer data over the Hyper Text Transfer Protocol (HTTP).

HTTP Module

Http module is used to create the web servers which can take some request from the client and return the response accordingly.

Http modules helps you to create the web server and start it at a specific port on your system and the clients will make the request there only.

```
var http = require('http');

//create a server object:
http.createServer(function (req, res) {
  res.write('Hello World!'); //write a response to the cli
  res.end(); //end the response
}).listen(8080); //the server object listens on port 8080
```

As in the above example we created a simple web server which is running at ip: localhost:8080.

createServer(function) => This method provided by http module helps you to create a http server. The createServer function will take another function from you and it will pass the request (req), response (res) object to your provided function so that your function can control both of them.

So whenever anyone will make request to this web server it will call the function provided by you and pass the incoming request and outgoing response to your function and call it.

Refer to httpServer file in this code (Practiced in class) : <https://github.com/Ashish1322/mentor-kart-files-batch-4/tree/main/backend%20Tutorials/first-backend>

Read more about http module: https://www.w3schools.com/nodejs/nodejs_http.asp