Node.js HTTP Module

The Built-in 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).

To include the HTTP module, use the `require()` method:

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

Node.js as a Web Server

The HTTP module can create an HTTP server that listens to server ports and gives a response back to the client.

Use the `createServer()` method to create an HTTP server:

Example

Get your own Node.js Server

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

//create a server object:
http.createServer(function (req, res) {
  res.write('Hello World!'); //write a response to the client
```

Run example »

The function passed into the `http.createServer()` method, will be executed when someone tries to access the computer on port 8080.

Save the code above in a file called "demo_http.js", and initiate the file:

Initiate demo_http.js:

```
C:\Users\Your Name>node demo_http.js
```

If you have followed the same steps on your computer, you will see the same result as the example: http://localhost:8080

Add an HTTP Header

If the response from the HTTP server is supposed to be displayed as HTML, you should include an HTTP header with the correct content type:

Example

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

Run example »

The first argument of the `res.writeHead()` method is the status code, 200 means that all is OK, the second argument is an object containing the response headers.

The function passed into the `http.createServer()` has a `req` argument that represents the request from the client, as an object (http.IncomingMessage object).

This object has a property called "url" which holds the part of the url that comes after the domain name:

demo_http_url.js

```
var http = require('http');
http.createServer(function (req, res) {
  res.writeHead(200, {'Content-Type': 'text/html'});
  res.write(req.url);
  res.end();
}).listen(8080);
```

Save the code above in a file called "demo_http_url.js" and initiate the file:

Initiate demo_http_url.js:

```
C:\Users\Your Name>node demo_http_url.js
```

If you have followed the same steps on your computer, you should see two different results when opening these two addresses:

http://localhost:8080/summer

Will produce this result:

```
/summer
```

Run example »

http://localhost:8080/winter

Run example »

Split the Query String

There are built-in modules to easily split the query string into readable parts, such as the URL module.

Example

Split the query string into readable parts:

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

http.createServer(function (req, res) {
  res.writeHead(200, {'Content-Type': 'text/html'});
  var q = url.parse(req.url, true).query;
  var txt = q.year + " " + q.month;
  res.end(txt);
}).listen(8080);
```

Save the code above in a file called "demo_querystring.js" and initiate the file:

Initiate demo_querystring.js:

```
C:\Users\Your Name>node demo_querystring.js
```

The address:

http://localhost:8080/?year=2017&month=July