

NODE.JS - FIRST APPLICATION

http://www.tutorialspoint.com/nodejs/nodejs_first_application.htm

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Before creating actual "Hello, World!" application using Node.js, let us see the parts of a Node.js application. A Node.js application consists of following three important parts:

1. **Import required modules:** We use **require** directive to load a Node.js module.
2. **Create server:** A server which will listen to client's request similar to Apache HTTP Server.
3. **Read request and return response:** server created in earlier step will read HTTP request made by client which can be a browser or console and return the response.

Creating Node.js Application

Step 1 - Import required module

We use **require** directive to load http module and store returned HTTP instance into http variable as follows:

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

Step 2: Create Server

At next step we use created http instance and call **http.createServer** method to create server instance and then we bind it at port 8081 using **listen** method associated with server instance. Pass it a function with parameters request and response. Write the sample implementation to always return "Hello World".

```
http.createServer(function (request, response) {  
    // Send the HTTP header  
    // HTTP Status: 200 : OK  
    // Content Type: text/plain  
    response.writeHead(200, {'Content-Type': 'text/plain'});  
  
    // Send the response body as "Hello World"  
    response.end('Hello World\n');  
}).listen(8081);  
  
// Console will print the message  
console.log('Server running at http://127.0.0.1:8081/');
```

Above code is enough to create an HTTP server which listens ie. wait for a request over 8081 port on local machine.

Step 3: Testing Request & Response

Let's put step 1 and 2 together in a file called **main.js** and start our HTTP server as shown below:

```
var http = require("http");  
  
http.createServer(function (request, response) {  
    // Send the HTTP header  
    // HTTP Status: 200 : OK  
    // Content Type: text/plain  
    response.writeHead(200, {'Content-Type': 'text/plain'});  
  
    // Send the response body as "Hello World"  
    response.end('Hello World\n');  
}).listen(8081);
```

```
// Console will print the message
console.log('Server running at http://127.0.0.1:8081/');
```

Now execute the main.js to start the server as follows:

```
$ node main.js
```

Verify the Output. Server has started

```
Server running at http://127.0.0.1:8081/
```

Make a request to Node.js server

Open <http://127.0.0.1:8081/> in any browser and see the below result.



Congratulations, you have your first HTTP server up and running which is responding all the HTTP requests at port 8081

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