

NodeJS

NodeJS:

Node.js is a server side platform built on javascript

Node.js was developed by Ryan Dahl in 2009

Node Js is very fast for functionality.

NdeJs version :

Totally 300 versions are available.

Latest version is v6.3.0 released on 06-Jul-2016 17:13

NMP:

- Share and reuse our code easily
- It has more plugin

Environment Setup:

1. Download node from this link <https://nodejs.org/en/ and then install>.

Create a project:

1. create a folder for project
2. cmd > npm init ex: D:\example App's\nodejs\sample demo>npm init (initialize the project)
3. give name and version
4. see your project folder created package.json file
5. create server.js file and write this coding

```
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/');
```

6. cmd> node server.js

7. copy the output url and paste in web browser.

Node with express:

Express is a minimal and flexible Node.js web application framework that provides a robust set of features for web and mobile applications.

Basic routing:

Routing refers to determining how an application responds to a client request to a particular endpoint, which is a URI (or path) and a specific HTTP request method (GET, POST, and so on).

Each route can have one or more handler functions, which are executed when the route is matched.

Methods:

Get, Post, Put, Delete are mostly used.

1. cmd> npm install express --save (install express)
2. See your project created node module folder (all plugin store in this folder)
3. **server.js:**

```
var express = require("express"),
    app = express();                                //app is an instance of express.

app.get('/',function(req,res){                      // function executed when the route is
    res.send("hello world");                         matched
});

app.post('/test', function (req, res) {
    res.send("this is post method");
});

app.listen(3000, function () {
```

```
// Console will print the message
console.log('Example app listening on port 3000!');
});
```

4. cmd> node server.js

Get Request:

1. cmd> npm install body-parser --save (use to get req from body)
2. In server.js

```
var bodyParser = require('body-parser');
app.use(bodyParser.json({ type: 'application/*+json' }));
app.use(bodyParser.urlencoded());
//using post to get req value
app.post('/test', function (req, res) {
    console.log(req.body.name);
    res.send(req.body.name);
});
```

3. cmd> node server.js

Correct Structure for folder:

```
app
  --config
  --controller
  --modules
  --router
  --service
```

- Config folder handle db connection files
- Router folder handle routing files
- Controller files are middleware of router and service files
- Service files are used for functionality
- Modules are contain table structure.

1. In **server.js**:

```
var routers = require('./app/router/router');
var router = express.Router();
routers.apiRouters(router);
```

```
app.use('/', router);
```

2. Router/router.js:

```
var user = require('../controller/usercontroller');  
module.exports = {  
  apiRouters: function (router) {  
    user.GetMsg(router);  
  }  
}
```

3. Controller/usercontroller.js:

```
var user = require('../service/userservice');  
  
module.exports = {  
  GetMsg: function (router) {  
    router.get('/getmsg', function (req, res,next) {  
      // function executed when the route is matched  
      user.GetMsgDetial(req, res);  
    });  
  }  
}
```

4. Service/userservice.js

```
module.exports = {  
  GetMsgDetial: function (req, res, next) {  
    return res.send("Hai Welcome");  
  }  
}
```