

# 9월 24일 (금)

## 1. 코딩애플 - Node.js & MongoDB - Part 1

### 9) 폼에 입력한 데이터를 서버에 전송하는 법 (POST 요청)

지난 수업에서 만든 할 일 기록하기 write.html 을 생성하였다.

The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows a "TODOAPP" folder containing "index.html", "package-lock.json", "package.json", "server.js", and "write.html".
- Code Editor:** Displays the "server.js" file with the following code:

```
18
19 app.get('/', function(요청, 응답){
20   응답.sendFile(__dirname + '/index.html')
21 });
22
23 app.get('/write', function(요청, 응답){
24   응답.sendFile(__dirname + '/write.html')
25 });
```

A note in Korean is overlaid on the code: "누가 /write로 접속하면 write.html 보내주세요~".
- Terminal:** Shows the output of the nodemon command:

```
[nodemon] starting `node server.js`
listening on 8080
[nodemon] restarting due to changes...
[nodemon] starting `node server.js`
listening on 8080
```

Todo App

할일

Due date

Submit

```
File Edit Selection View Go Debug Terminal Help server.js - todoapp - Visual Studio Code
EXPLORER OPEN EDITORS TODOAPP node_modules index.html package-lock.json package.json server.js write.html
14
15 app.get('/beauty', function(요청, 응답){
16     응답.send('뷰티용품 쇼핑 할 수 있는 페이지입니다.');
17 });
18
19 app.get('/', function(요청, 응답){
20     응답.sendFile(__dirname + '/index.html')
21 });
22
23 app.get('/write', function(요청, 응답){
24     응답.sendFile(__dirname + '/write.html')
25 });
[nodemon] starting `node server.js`
listening on 8080
[nodemon] restarting due to changes...
[nodemon] starting `node server.js`
listening on 8080
```

.get() 함수에  
파라미터를 2개 집어넣는 중임

(문법학습 타임)

Todo App

할일

Due date

Submit

```
File Edit Selection View Go Debug Terminal Help server.js - todoapp - Visual Studio Code
EXPLORER OPEN EDITORS TODOAPP node_modules index.html package-lock.json package.json server.js write.html
14
15 app.get('/beauty', function(요청, 응답){
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18
19 app.get('/', function(요청, 응답){
20     응답.sendFile(__dirname + '/index.html')
21 });
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23 app.get('/write', function(요청, 응답){
24     응답.sendFile(__dirname + '/write.html')
25 });
[nodemon] starting `node server.js`
listening on 8080
[nodemon] restarting due to changes...
[nodemon] starting `node server.js`
listening on 8080
```

함수 안에 함수(function(){})  
= 콜백함수

(문법학습 타임)

순차적으로 실행하고 풀 때 씁니다

함수 안에 함수(function(){})  
= 콜백함수

(문법학습 타임)

```

14
15 app.get('/beauty', function(요청, 응답){
16     응답.send('뷰티용품 쇼핑할 수 있는 페이지입니다.');
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20     응답.sendFile(__dirname + '/index.html')
21 });
22
23 app.get('/write', function(요청, 응답){
24     응답.sendFile(__dirname + '/write.html')
25 });

```

.get ('경로', function(요청내용, 응답할 방법){ })

(문법학습 타임)

```

14
15 app.get('/beauty', function(요청, 응답){
16     응답.send('뷰티용품 쇼핑할 수 있는 페이지입니다.');
17 });
18
19 app.get('/', function(요청, 응답){
20     응답.sendFile(__dirname + '/index.html')
21 });
22
23 app.get('/write', function(요청, 응답){
24     응답.sendFile(__dirname + '/write.html')
25 });

```

```

14
15 app.get('/beauty', (요청, 응답) => {
16   응답.send('뷰티용품 쇼핑할 수 있는 페이지입니다.');
17 });
18
19 app.get('/', function(요청, 응답){
20   응답.sendFile(__dirname + '/index.html')
21 });
22
23 app.get('/write', function(요청, 응답){
24   응답.sendFile(__dirname + '/write.html')
25 });

```

(ES6 신문법)

.get ('경로', ( 요청내용, 응답할 방법 ) => {} )

[nodemon] starting `node server.js`  
listening on 8080  
[nodemon] restarting due to changes...  
[nodemon] starting `node server.js`  
listening on 8080

(문법학습 타임)

```

37 </nav>
38
39 <div class="container mt-4">
40   <form action="/add" method="POST"> (꼭 있어야하는 2개 속성)
41     <div class="form-group">
42       <label>할일</label>
43       <input type="text" class="form-control">
44     </div>
45     <div class="form-group">
46       <label>Due date</label>
47       <input type="text" class="form-control">
48     </div>
49     <button type="submit" class="btn btn-danger">Submit</button>
50   </form>
51 </div>
52

```

<form> 태그 기능개발

[nodemon] starting `node server.js`  
listening on 8080  
[nodemon] restarting due to changes...  
[nodemon] starting `node server.js`  
listening on 8080

Submit 버튼 누르면  
폼에 입력한 제목과 날짜를  
서버로 전달해보자

The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows the project structure with files: package.json, server.js, and write.html.
- Code Editor:** Displays the `server.js` file content:

```
15 app.get('/beauty', function(요청, 응답){  
16     응답.send('뷰티용품 쇼핑할 수 있는 페이지입니다.');//  
17 });  
18  
19 app.get('/', function(요청, 응답){  
20     응답.sendFile(__dirname + '/index.html')  
21 });  
22  
23 app.get('/write', function(요청, 응답){  
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- Terminal:** Shows the output of the nodemon command:

```
[nodemon] starting `node server.js`  
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[nodemon] restarting due to changes...  
[nodemon] starting `node server.js`  
listening on 8080
```
- Browser Preview:** Shows a simple todo application with fields for title and due date, and a submit button.
- Text Overlay:** A large text box on the right side contains Korean text:

Submit 버튼 누르면  
폼에 입력한 제목과 날짜를  
서버로 전달해보자

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19 app.get('/', function(요청, 응답){  
20     응답.sendFile(__dirname + '/write.html')  
21 });  
22  
23 app.get('/write', function(요청, 응답){  
24     응답.sendFile(__dirname + '/write.html')  
25 });  
26  
27 어떤 사람이 /add 경로로 POST 요청을 하면...  
28 ?? 를 해주세요~
```
- Terminal:** Shows the output of the nodemon command:

```
[nodemon] starting `node server.js`  
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- Browser Preview:** Shows a simple todo application with fields for title and due date, and a submit button.
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Submit 버튼 누르면  
폼에 입력한 제목과 날짜를  
서버로 전달해보자

```

21 });
22
23 app.get('/write', function(요청, 응답){
24   응답.sendFile(__dirname + '/write.html')
25 });
26
27 어떤 사람이 /add 경로로 POST 요청을 하면...
28 ?? 를 해주세요~
29
30 app.post('경로', function(){
31   응답.send('전송완료')
32 });
33
34

```

**app.post('경로', 콜백함수)**

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL  
1: node

```

at Module.load (internal/modules/cjs/loader.js:815:32)
at Function.Module._load (internal/modules/cjs/loader.js:727:14)
at Function.Module.runMain (internal/modules/cjs/loader.js:1047:10)
at internal/main/run_main_module.js:17:11
[nodemon] app crashed - waiting for file changes before starting...

```

```

21 });
22
23 app.get('/write', function(요청, 응답){
24   응답.sendFile(__dirname + '/write.html')
25 });
26
27 app.post('/add', function(요청, 응답){
28   응답.send('전송완료')
29 });
30
31

```

**뭐여?**

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL  
1: node

```

[nodemon] starting `node server.js`
listening on 8080
[nodemon] restarting due to changes...
[nodemon] starting `node server.js`
listening on 8080

```

submit 을 누르면 전송완료가 홈페이지에 로그된다.

The screenshot shows a Visual Studio Code interface. In the Explorer sidebar, there are files: package.json, server.js, and write.html. The server.js file is open in the editor, showing Node.js code for a todo application. The terminal below shows the output of nodemon starting the server on port 8080.

```

    21 });
22
23 app.get('/write', function(요청, 응답){
24     응답.sendFile(__dirname + '/write.html')
25 });
26
27 app.post('/add', function(요청, 응답){
28     응답.send('전송완료')
29 });
30
31

```

[nodemon] starting `node server.js`  
listening on 8080  
[nodemon] restarting due to changes...  
[nodemon] starting node server.js  
listening on 8080

input에 적은 정보는 어딨지?

The screenshot shows a Visual Studio Code interface. In the Explorer sidebar, there are files: package.json, server.js, and write.html. The server.js file is open in the editor, showing Node.js code for a todo application. The terminal below shows the output of nodemon starting the server on port 8080.

```

    21 });
22
23 app.get('/write', function(요청, 응답){
24     응답.sendFile(__dirname + '/write.html')
25 });
26
27 app.post('/add', function(요청, 응답){
28     응답.send('전송완료')
29 });
30
31

```

[nodemon] starting `node server.js`  
listening on 8080  
PS C:\Users\harry\Desktop\todoapp>  
PS C:\Users\harry\Desktop\todoapp>  
PS C:\Users\harry\Desktop\todoapp>  
PS C:\Users\harry\Desktop\todoapp>

**▲ 요기있지롱**  
(근데 쉽게 꺼내쓰려면 라이브러리 필요)  
(body-parser)

```

21 });
22
23 app.get('/write', function(요청, 응답){
24     응답.sendFile(__dirname + '/write.html')
25 });
26
27 app.post('/add', function(요청, 응답){
28     응답.send('전송완료')
29 });
30

```

1. npm install body-parser

```

npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents
2: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})

+ body-parser@1.19.0
updated 1 package and audited 299 packages in 1.958s

1 package is looking for funding
  run `npm fund` for details

found 0 vulnerabilities

```

```

PS C:\Users\harry\Desktop\todoapp> nodemon server.js

```

```

1 const express = require('express');
2 const app = express();
3 const bodyParser = require('body-parser');
4 app.use(bodyParser.urlencoded({extended : true}));
5
6 app.listen(8080, function(){
7     console.log('listening on 8080')
8 });
9
10 //누군가가 /pet 으로 방문을 하면..

```

2. 이거 복붙 (이해 필요X)

```

[nodemon] to restart at any time, enter `rs`
[nodemon] watching dir(s): ***!
[nodemon] watching extensions: js,mjs,json
[nodemon] starting `node server.js`
listening on 8080
[nodemon] restarting due to changes...
[nodemon] starting `node server.js`
listening on 8080
[nodemon] restarting due to changes...
[nodemon] starting `node server.js`
listening on 8080

```

[nodemon] to restart at any time, enter `rs`  
[nodemon] watching dir(s): \*.\*  
[nodemon] watching extensions: js,mjs,json  
[nodemon] starting 'node server.js'  
listening on 8080  
[nodemon] restarting due to changes...  
[nodemon] starting 'node server.js'  
listening on 8080  
[nodemon] restarting due to changes...  
[nodemon] starting 'node server.js'  
listening on 8080

body-parser는  
요청 데이터(body) 해석을 쉽게 도와줌

25 app.get('/write', function(요청, 응답){  
26 응답.sendFile(\_\_dirname + '/write.html')  
27 });
28
29 app.post('/add', function(요청, 응답){  
30 응답.send('전송완료')
31 });
32
33

[nodemon] to restart at any time, enter `rs`  
[nodemon] watching dir(s): \*.\*  
[nodemon] watching extensions: js,mjs,json  
[nodemon] starting 'node server.js'  
listening on 8080  
[nodemon] restarting due to changes...  
[nodemon] starting 'node server.js'  
listening on 8080  
[nodemon] restarting due to changes...  
[nodemon] starting 'node server.js'  
listening on 8080

POST 요청으로 서버에 데이터 전송하고 싶으면  
1. body-parser 필요

Todo App

할일  
 sdfdsdf

Due date  
 sdfsdfsdf

Submit

```

39   <div class="container mt-4">
40     <form action="/add" method="POST">
41       <div class="form-group">
42         <label>할일</label>
43         <input type="text" class="form-control" name="title">
44       </div>
45       <div class="form-group">
46         <label>Due date</label>
47         <input type="text" class="form-control" name="date">
48       </div>

```

[nodemon] to restart at any time, enter `rs`  
[nodemon] watching dir(s): \*.\*  
[nodemon] watching extensions: js,mjs,json  
[nodemon] starting 'node server.js'  
listening on 8080  
[nodemon] restarting due to changes...  
[nodemon] starting 'node server.js'  
listening on 8080  
[nodemon] restarting due to changes...  
[nodemon] starting 'node server.js'  
listening on 8080

POST요청으로 서버에 데이터 전송하고 싶으면  
2. form데이터의 경우 input들에 name 쓰기

Todo App

할일  
 sdfdsdf

Due date  
 sdfsdfsdf

Submit

```

40   <form action="/add" method="POST">
41     <div class="form-group">
42       <label>할일</label>
43       <input type="text" class="form-control" name="title">
44     </div>
45     <div class="form-group">
46       <label>Due date</label>
47       <input type="text" class="form-control" name="date">
48     </div>
49   <button type="submit" class="btn btn-danger">Submit</button>

```

[nodemon] to restart at any time, enter `rs`  
[nodemon] watching dir(s): \*.\*  
[nodemon] watching extensions: js,mjs,json  
[nodemon] starting 'node server.js'  
listening on 8080  
[nodemon] restarting due to changes...  
[nodemon] starting 'node server.js'  
listening on 8080  
[nodemon] restarting due to changes...  
[nodemon] starting 'node server.js'  
listening on 8080

서버에서 input을 구분하기위해  
name="이름" 쓰는 것  
POST요청으로 서버에 데이터 전송하고 싶으면  
2. form데이터의 경우 input들에 name 쓰기

```

[nodemon] restarting due to changes...
[nodemon] starting `node server.js`
listening on 8080
[nodemon] restarting due to changes...
[nodemon] starting `node server.js`
listening on 8080
[nodemon] restarting due to changes...
[nodemon] starting `node server.js`
listening on 8080
dsfsdf
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaa

```

input에 적은 정보가  
서버로 전달되네

```

[nodemon] starting `node server.js`
listening on 8080
[nodemon] restarting due to changes...
[nodemon] starting `node server.js`
listening on 8080
dsfsdf
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
[nodemon] restarting due to changes...
[nodemon] starting `node server.js`
listening on 8080
{ title: 'aaaaaaaaaaaaaaaaaaaaaaaaaaaaaa', date: 'ffdfgdfg' }

```

▼ form에서 보낸 자료  
(= 요청.body)

3. 요청.body 라고 하면  
요청했던 form에 적힌 데이터 수신 가능

The screenshot shows a Visual Studio Code interface with a browser window on the left displaying a 'Todo App' with a single item: 'aaaaaaaaaaaaaaaaaaaaaaaaaaaaaa'. The main area shows the code editor with a file named 'server.js' containing the following code:

```
26     응답.sendFile(__dirname + '/write.html')
27 });
28
29 app.post('/add', function(요청, 응답){
30     응답.send('전송완료');
31     console.log(요청.body.date);
32     console.log(요청.body.title);
33     DB에 저장해주세요
34 });
35
```

The line 'DB에 저장해주세요' is underlined with a red squiggle, indicating a syntax error. The terminal at the bottom shows the error message:

```
SyntaxError: Unexpected identifier
at Module._compile (internal/modules/cjs/loader.js:895:18)
at Object.Module._extensions..js (internal/modules/cjs/loader.js:995:10)
at Module.load (internal/modules/cjs/loader.js:815:32)
at Function.Module._load (internal/modules/cjs/loader.js:727:14)
at Function.Module.runMain (internal/modules/cjs/loader.js:1047:10)
at internal/main/run_main_module.js:17:11
[nodemon] app crashed - waiting for file changes before starting...
```

지금까지 서버에 데이터를 보내는 방법을 배웠다. 이제 배워야 할 것은 서버로 보낸 데이터를 DB에 보내는 것이다.