

BE NodeJS

Tugas: Framework ExpressJS

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Soal :

1. Instalasi dan Setup Project

- Download source untuk latihan dari tautan ini
https://drive.google.com/file/d/1Eh7-zSCrgbKn8w_aYow7FXmK_WySN904/view?usp=sharing
- Buka source di Visual Studio Code, kemudian install semua package yang diperlukan melalui terminal dengan perintah npm install

2. Membuat Server Sederhana

Buat route untuk /hello yang mengembalikan

```
{  
  "message": "Success fetch message",  
  "data": "Hello World!"  
}
```

Buat route untuk /user yang mengembalikan

```
{  
  "message": "Success fetch user",  
  "data": {  
    "id": 1,  
    "name": "Budi",  
    "username": "budidu",  
    "email": "budidu@mail.com"  
  }  
}
```

Buat direktori public dan tambahkan file HTML sederhana, kemudian serve file tersebut menggunakan middleware express.static.

Jawab :

1.

```
Leonardhorsitanggang@Leonardhos-MacBook-Pro sanbercode-nodejs-xpress % cd tugas-framework-express
Leonardhorsitanggang@Leonardhos-MacBook-Pro tugas-framework-express % npm install

added 124 packages, and audited 125 packages in 1s

16 packages are looking for funding
  run `npm fund` for details

6 vulnerabilities (1 low, 2 moderate, 3 high)

To address all issues, run:
  npm audit fix

Run `npm audit` for details.
```

Gambar 1.1 Instalasi package untuk source code

2. Source code dan Output

```
TS index.ts U X
tugas-framework-express > src > TS index.ts > init
1  import express, { Request, Response } from "express";
2
3  const PORT = 3000;
4
5  function init() {
6    const app = express();
7
8    // Buat direktori public dan tambahkan file HTML sederhana, kemud
9    app.use(express.static('public'))
10
11    app.get("/", (req: Request, res: Response) => {
12      res.status(200).json({
13        message: "OK",
14        data: null,
15      });
16    });
17
18    // Buat route untuk /hello yang mengembalikan
19    app.get("/hello", (req: Request, res: Response) => {
20      res.status(200).json({
21        message: "Success fetch message",
22        data: "Hello World!",
23      });
24    });
25
26    // Buat route untuk /user yang mengembalikan
27    app.get("/user", (req: Request, res: Response) => {
28      res.status(200).json({
29        message: "Success fetch user",
30        data: {
31          id: 1,
32          name: "Budi",
33          username: "budidu",
34          email: "budidu@mail.com"
35        },
36      });
37    });
38
39    app.listen(PORT, () => {
40      console.log(`Server is running on http://localhost:${PORT}`);
41    });
42  }
43
44  init();
45
```

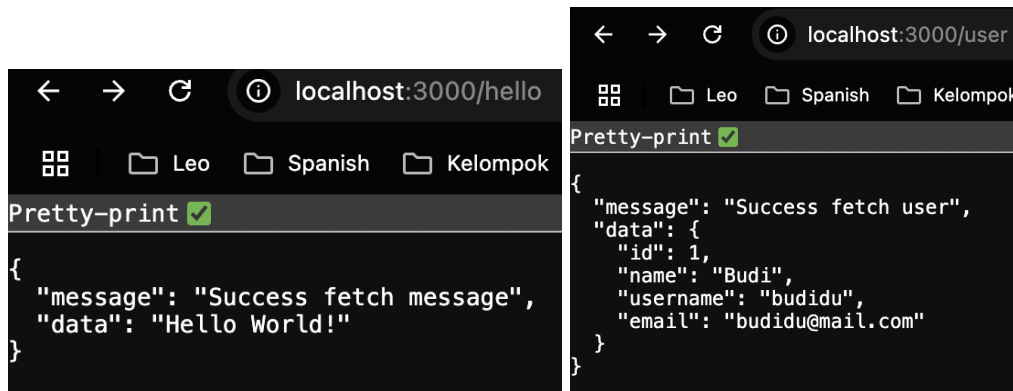
Gambar 2.1 Inisiasi static public route, API GET /hello, dan API GET /user

```

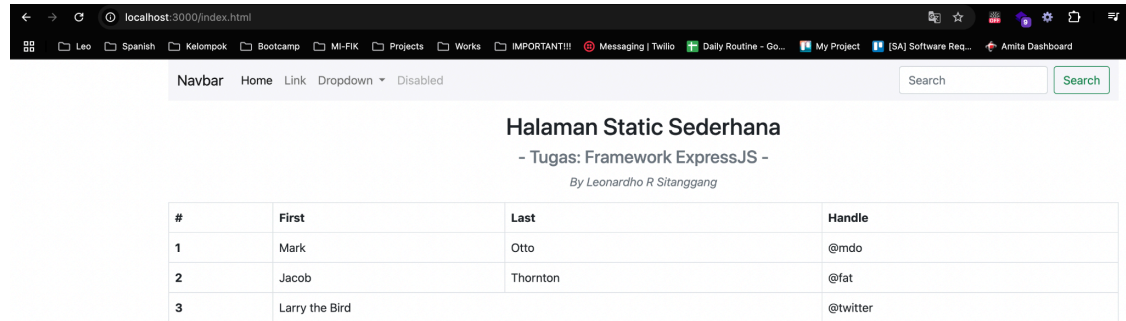
index.html U x
tugas-framework-express > public > index.html > html > body > div.container.d-block.mx-auto.mx-4 > div.text-center > p.text
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta http-equiv="X-UA-Compatible" content="IE=edge">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>Halaman Static Express JS</title>
8
9   <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet" integrity=
10 </head>
11 <body>
12   <div class="container d-block mx-auto mx-4">
13     <nav class="navbar navbar-expand-lg navbar-light bg-light mb-3">
14       <div class="container-fluid">
15         <a class="navbar-brand" href="#">Navbar</a>
16         <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarSupp
17         <span class="navbar-toggler-icon"></span>
18       </button>
19       <div class="collapse navbar-collapse" id="navbarSupportedContent">
20         <ul class="navbar-nav me-auto mb-2 mb-lg-0">
21           <li class="nav-item">
22             <a class="nav-link active" aria-current="page" href="#">Home</a>
23           </li>
24           <li class="nav-item">
25             <a class="nav-link" href="#">Link</a>
26           </li>
27           <li class="nav-item dropdown">
28             <a class="nav-link dropdown-toggle" href="#" id="navbarDropdown" role="button" data-bs-to
29             <div class="dropdown-menu" id="navbarDropdown">
30               <ul class="dropdown-menu" aria-labelledby="navbarDropdown">
31                 <li><a class="dropdown-item" href="#">Action</a></li>
32                 <li><a class="dropdown-item" href="#">Another action</a></li>
33                 <li><hr class="dropdown-divider"></li>
34                 <li><a class="dropdown-item" href="#">Something else here</a></li>
35               </ul>
36             </li>
37           </li>
38           <li class="nav-item">
39             <a class="nav-link disabled" href="#" tabindex="-1" aria-disabled="true">Disabled</a>
40           </li>
41         </ul>
42         <form class="d-flex">
43           <input class="form-control me-2" type="search" placeholder="Search" aria-label="Search">
44           <button class="btn btn-outline-success" type="submit">Search</button>
45         </form>
46       </div>
47     </div>
48

```

Gambar 2.2 Code tampilan halaman static



Gambar 2.2 & Gambar 2.3 API response body GET /hello dan GET /user



Gambar 2.4 Route public /index.html

Repository :

- Github <https://github.com/FlazeFy/sanbercode-nodejs-xpress/tree/main/tugas-framework-express>

Refrensi :

- Materi Pekan 2.1 Framework Express JS
<https://sanbercode.com/bootcamp/class/684/materi/2-1-framework-expressjs/dc0618b7-fd52-4eec-a578-5ed88c4d5b3c>
- Materi Pekan 2.2 Routing Rest API
<https://sanbercode.com/bootcamp/class/684/materi/routing-rest-api/de70a7be-9056-40e0-bed0-c280c6bc1de0>
- Materi Pekan 2.3 Middleware ExpressJS
<https://sanbercode.com/bootcamp/class/684/materi/2-3-middleware-expressjs/c33672de-a33d-4916-b07c-9221b9e836b5>