

## Assignment 3

a. Create a Node.JS Application which serves a static website.

Index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Interactive Webpage</title>
  <style>
    body {
      font-family: 'Arial', sans-serif;
      margin: 0;
      padding: 0;
      box-sizing: border-box;
      background-color: #f4f4f4;
    }
    nav {
      background-color: #333;
      color: white;
      padding: 15px;
      text-align: center;
    }
    nav a {
      color: white;
      text-decoration: none;
      margin: 0 15px;
      font-size: 18px;
    }
    nav a:hover {
      text-decoration: underline;
    }
    .hero {
      background-image: url('https://via.placeholder.com/1500x500');
      background-size: cover;
      color: rgb(153, 221, 238);
      text-align: center;
      padding: 100px 20px;
    }
    .hero h1 {
      font-size: 3.5rem;
      margin-bottom: 20px;
    }
    .hero p {
      font-size: 1.5rem;
      margin-bottom: 40px;
    }
    .button {
      background-color: #ff6347;
      color: white;
```

```

padding: 15px 30px;
font-size: 1.2rem;
border: none;
cursor: pointer;
transition: background-color 0.3s;
}
.button:hover {
background-color: #ff4500;
}
footer {
background-color: #333;
color: white;
padding: 20px 0;
text-align: center;
}
@media (max-width: 768px) {
.hero h1 {
font-size: 2.5rem;
}

.hero p {
font-size: 1.2rem;
}
}
</style>
</head>
<body>
<!-- Navigation Bar -->
<nav>
<a href="#">Home</a>
<a href="#">About</a>
<a href="#">Services</a>
<a href="#">Contact</a>
</nav>
<!-- Hero Section -->
<div class="hero">
<h1>Welcome to Our Website!</h1>
<p>We offer top-quality services for your needs.</p>
<button class="button" onclick="changeContent()">Click Me!</button>
</div>
<!-- Footer -->
<footer>
<p>&copy; 2025 Your Company. All rights reserved.</p>
</footer>
<!-- Embedded JavaScript -->
<script>
function changeContent() {
const heroSection = document.querySelector('.hero');
heroSection.innerHTML = `
<h1>Thank you for clicking!</h1>
<p>We hope you enjoy exploring our website.</p>
<button class="button" onclick="goBack()">Go Back</button>
`;

```

```
    }  
    function goBack() {  
        window.location.reload();  
    }  
</script>
```

```
</body>  
</html>
```

### Index.js

```
const express = require('express');  
const app = express();  
const port = 4000;  
app.use(express.static('public'));  
app.listen(port, () => {  
    console.log(`Server is running on port ${port}`);  
});
```

Outputs:

```
PS D:\Ass3a> npm init  
This utility will walk you through creating a package.json file.  
It only covers the most common items, and tries to guess sensible defaults.  
  
See `npm help init` for definitive documentation on these fields  
and exactly what they do.  
  
Use `npm install <pkg>` afterwards to install a package and  
save it as a dependency in the package.json file.  
  
Press ^C at any time to quit.  
package name: (ass3a)  
version: (1.0.0)  
description: This is practical 3 a  
entry point: (index.js)  
test command:  
git repository:  
keywords:  
author:  
license: (ISC)  
About to write to D:\Ass3a\package.json:  
  
{  
  "name": "ass3a",  
  "version": "1.0.0",  
  "description": "This is practical 3 a",  
  "main": "index.js",  
  "scripts": {
```

Ln 40, Col 20 - Spaces: 4

```
"scripts": {
  "scripts": {
    "scripts": {
      "scripts": {
        "scripts": {
          "scripts": {
            "scripts": {
              "test": "echo \"Error: no test specified\" && exit 1"
            },
            "author": "",
            "license": "ISC"
          }
        }
      }
    }
  }
}

Is this OK? (yes) yes
npm notice
npm notice New major version of npm available! 9.6.7 -> 11.2.0
npm notice Changelog: https://github.com/npm/cli/releases/tag/v11.2.0
npm notice Run npm install -g npm@11.2.0 to update!
npm notice
PS D:\Ass3a> npm install express

added 69 packages, and audited 70 packages in 1s

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

found 0 vulnerabilities
PS D:\Ass3a> node index.js
Server is running on port 4000
█
```

