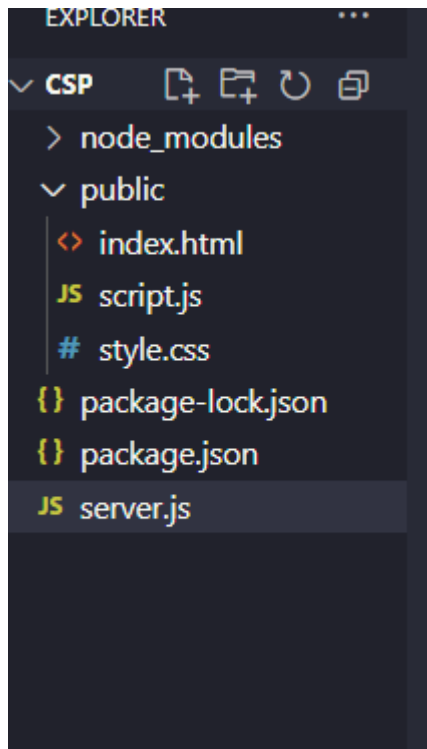


npm init -y

npm install express helmet



SERVER.JS //scriptSrc: ["'self'", "'unsafe-inline'"],

```
JS server.js x
JS server.js > ...
1  const express = require("express");
2  const helmet = require("helmet");
3
4  const app = express();
5  const PORT = 3000;
6
7  // Middleware para definir Content-Security-Policy
8  app.use(
9    helmet({
10      contentSecurityPolicy: {
11        directives: {
12          defaultSrc: ["'self'"], // Apenas recursos do próprio domínio
13          scriptSrc: ["'self'"], // Bloqueia scripts inline e externos não autorizados
14          styleSrc: ["'self'", "https://fonts.googleapis.com"], // Permite estilos internos e Google Fo
15          fontSrc: ["'self'", "https://fonts.gstatic.com"], // Permite fontes do Google
16        },
17      },
18    })
19  );
20
21  // Servir arquivos estáticos da pasta public/
22  app.use(express.static("public"));
23
24  app.listen(PORT, () => {
25    console.log(`Servidor rodando em http://localhost:${PORT}`);
26  });
27
```

INDEX.HTML

```
<> index.html x
public > <> index.html > ...
1  <!DOCTYPE html>
2  <html lang="pt-BR">
3  <head>
4    <meta charset="UTF-8">
5    <meta name="viewport" content="width=device-width, initial-scale=1.0">
6    <title>Página Segura com CSP</title>
7    <link rel="stylesheet" href="style.css">
8  </head>
9  <body>
10    <h1>Exemplo de Content Security Policy (CSP)</h1>
11
12    <p>Tente rodar um script malicioso no console ou injetar via DevTools!</p>
13
14    <button id="btnExecutar">Clique para Executar Script</button>
15
16    <script src="script.js"></script>
17  </body>
18  </html>
19
```

SCRIPT.JS

```
JS script.js x
public > JS script.js > ...
1  document.getElementById("btnExecutar").addEventListener("click", function () {
2    alert("Script externo permitido pela CSP!");
3  });
4
```

CSS

```
body {
  font-family: Arial, sans-serif;
  background-color: #e3f2fd;
  color: #0d47a1;
  text-align: center;
  margin: 0;
  padding: 20px;
}

h1 {
  color: #1565c0;
  font-size: 2em;
}

p {
  font-size: 1.2em;
  margin-bottom: 20px;
}

button {
  background-color: #2196f3;
  color: white;
  border: none;
  padding: 10px 20px;
  font-size: 1.1em;
  cursor: pointer;
  border-radius: 8px;
  transition: background-color 0.3s ease-in-out;
}

button:hover {
  background-color: #1976d2;
}

.container {
  max-width: 600px;
  background: white;
```

```
padding: 20px;
border-radius: 10px;
box-shadow: 0 4px 8px rgba(0, 0, 0, 0.2);
margin: auto;
}
```

document.write("<script>alert('XSS')</script>");

Gerenciamento de variáveis de ambiente

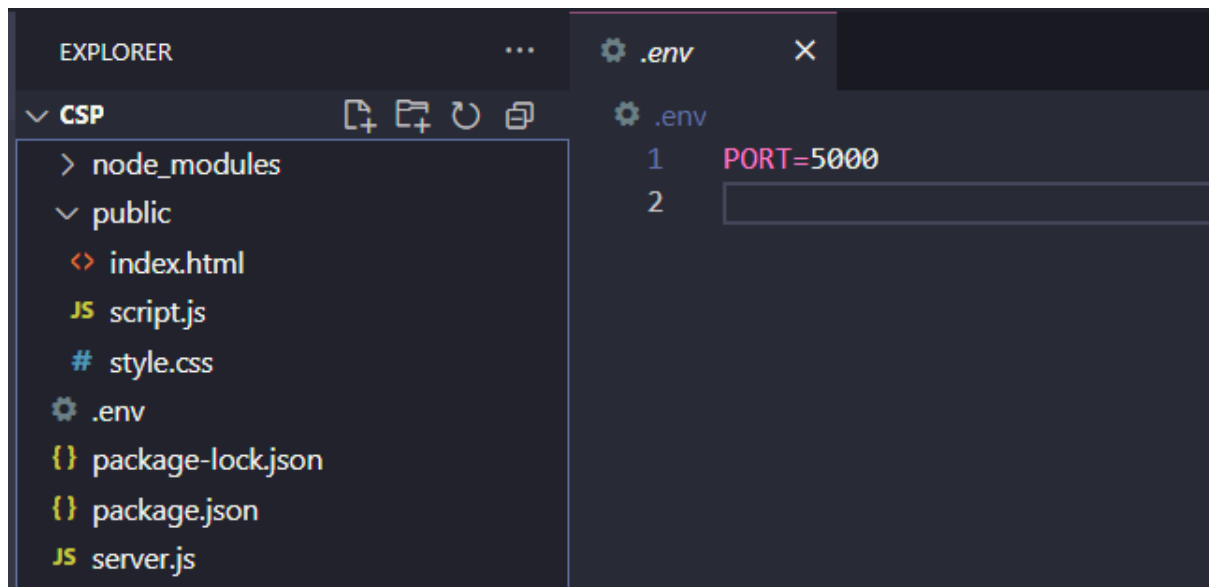
INCLUINDO O PACOTE dotenv

npm i dotenv

server.js

```
JS server.js X
JS server.js > ...
1  const express = require("express");
2  const helmet = require("helmet");
3
4  const app = express();
5  require('dotenv').config();
6
7  //const PORT = 3000;
8  const PORT = process.env.PORT || 3000;
9
```

.env



.gitignore

