



**EVOTECH EDUCATION ONLINE EDUCATIONAL INSTITUTE**  
**REACT JS MASTER COURSE GROUP 03 – SATURDAY**  
**Day 05 Assessment**

Name: K t Kodithuwakku

Index ON: ES00396

**1. Task: Create and Run a Next.js Project**

**1.1. Setup Development Environment**

**1.1.1. Install Node.js and npm on your machine.**

**1.1.2. Use Create Next App to initialize a new Next.js project.**

```
Command Prompt
Microsoft Windows [Version 10.0.26100.3194]
(c) Microsoft Corporation. All rights reserved.

C:\Users\MSI GF63>node -v
v20.16.0

C:\Users\MSI GF63>npm -v
10.8.1

C:\Users\MSI GF63>
```

```
npm install
Microsoft Windows [Version 10.0.26100.3194]
(c) Microsoft Corporation. All rights reserved.

C:\Users\MSI GF63>npx create-next-app@latest mflix-dashboard
Need to install the following packages:
create-next-app@15.2.2
Ok to proceed? (y) y
✔ Would you like to use TypeScript? ... No / Yes
✔ Would you like to use ESLint? ... No / Yes
✔ Would you like to use Tailwind CSS? ... No / Yes
✔ Would you like your code inside a 'src/' directory? ... No / Yes
✔ Would you like to use App Router? (recommended) ... No / Yes
✔ Would you like to use Turbopack for 'next dev'? ... No / Yes
✔ Would you like to customize the import alias ('@/*' by default)? ... No / Yes
✔ What import alias would you like configured? ... @/*
Creating a new Next.js app in C:\Users\MSI GF63\mflix-dashboard.
```

## 2. Project Structure Exploration

### 2.1. Open the newly created project in your code editor.

#### 2.1.1. Identify and describe the purpose of the following files

- package.json
- package-lock.json

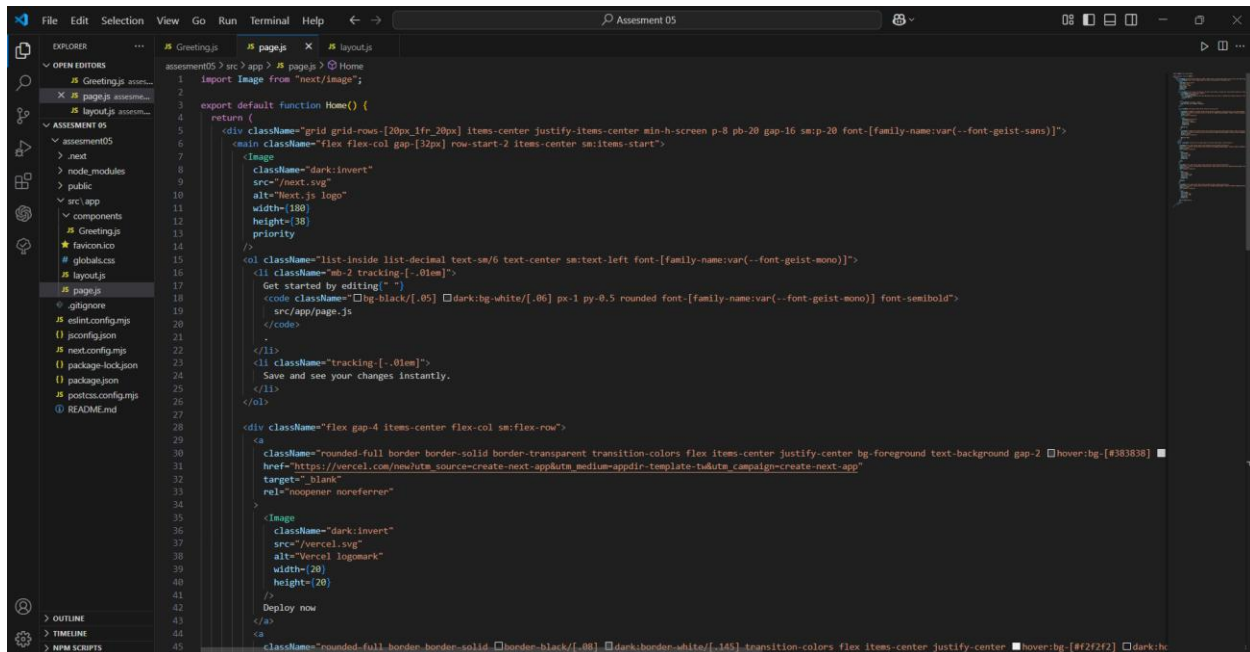
```
JS page.js X # globals.css JS tailwind.config.js
mflix-dashboard > () package.json > ...
1 {
2   "name": "mflix-dashboard",
3   "version": "0.1.0",
4   "private": true,
5   "scripts": {
6     "dev": "next dev --turbo",
7     "build": "next build",
8     "start": "next start",
9     "lint": "next lint"
10  },
11  "dependencies": {
12    "react": "^19.0.0",
13    "react-dom": "^19.0.0",
14    "next": "15.2.1"
15  },
16  "devDependencies": {
17    "@tailwindcss/postcss": "^4",
18    "tailwindcss": "^4",
19    "eslint": "^9",
20    "eslint-config-next": "15.2.1",
21    "@eslint/eslintrc": "^3"
22  }
23 }
24
```

```
JS page.js X # globals.css JS tailwind.config.js
mflix-dashboard > () package-lock.json > () packages > () -- > () devDependencies > @ tailwindcss
1 {
2   "name": "mflix-dashboard",
3   "version": "0.1.0",
4   "lockfileVersion": 3,
5   "requires": true,
6   "packages": {
7     "": {
8       "name": "mflix-dashboard",
9       "version": "0.1.0",
10      "dependencies": {
11        "next": "15.2.1",
12        "react": "^19.0.0",
13        "react-dom": "^19.0.0"
14      },
15      "devDependencies": {
16        "@eslint/eslintrc": "^3",
17        "@tailwindcss/postcss": "^4",
18        "eslint": "^9",
19        "eslint-config-next": "15.2.1",
20        "tailwindcss": "^4"
21      }
22    },
23    "node_modules/@alloc/quick-lru": {
24      "version": "5.2.0",
25      "resolved": "https://registry.npmjs.org/@alloc/quick-lru/-/quick-lru-5.2.0.tgz",
26      "integrity": "sha512-UrgVCd/4g197a4i3L3D7i1R3uW76I4ZdS2eS+e4d0P9K/8a9N/XW4r8Z/5PRuyge8UuX7dByVw7s7tTfA==",
27      "dev": true,
28      "license": "MIT",
29      "engines": {
30        "node": ">=10"
31      },
32      "funding": {
33        "url": "https://github.com/sponsors/sindresorhus"
34      }
35    },
36    "node_modules/@emnapi/runtime": {
37      "version": "1.3.1",
38      "resolved": "https://registry.npmjs.org/@emnapi/runtime/-/runtime-1.3.1.tgz",
39      "integrity": "sha512-kVH96AasEITCuwQpVwUUL4hVx/BOh+L8O77/50DK9tON9NSykhrtA7z7QY1NR/t1sZuZit58drW6S1391A==",
40      "license": "MIT",
41      "optional": true,
42      "dependencies": {
43        "tslib": "^2.4.0"
44      }
45    },
46  },
47}
```

### 3. JSX Implementation (Optional)

#### 3.1. Create a new component using JSX.

#### 3.2. Integrate the component into the main page of your Next.js project.



### 4. Node.js and npm Usage

#### 4.1. Explain the role of Node.js in your project.

- Runs JavaScript outside the browser.
- Helps manage dependencies and execute server-side code in Next.js.

#### 4.2. List and describe at least three npm commands you used during the setup and development process.

- npm install → Installs dependencies.
- npm run dev → Starts the development server.
- npm install <package> → Installs third-party libraries.

## 5. Dependencies Management

### 5.1. Identify the dependencies and devDependencies in your package.json.

- Dependencies: Required for running the app (e.g., react, next).
- devDependencies: Only needed during development (e.g., eslint).

### 5.2. Explain the difference between dependencies and devDependencies.

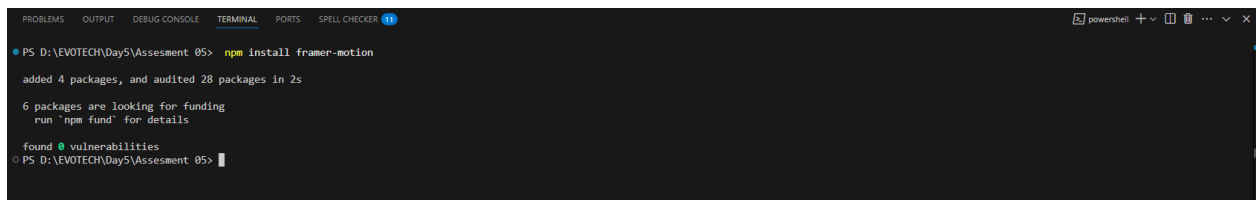
- dependencies → Needed for production.
- devDependencies → Only needed for development.

### 5.3. Research and provide a brief history of React.js and Next.js, including key contributors and milestones.

- React.js (2013),
  - Created by Facebook (Meta).
  - Key contributor: Jordan Walke.
  - Introduced Virtual DOM for faster UI updates.
- Next.js (2016),
  - Created by Vercel (formerly Zeit).
  - Adds server-side rendering (SSR) and static site generation (SSG) to React.

### 5.4. Install a third-party library that will be useful. (Ex: ky, clsx, framer-motion)

- `npm install framer-motion`



```
PS D:\EVOTECH\Day5\Assesment 05> npm install framer-motion
added 4 packages, and audited 28 packages in 2s

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

found 0 vulnerabilities
PS D:\EVOTECH\Day5\Assesment 05>
```

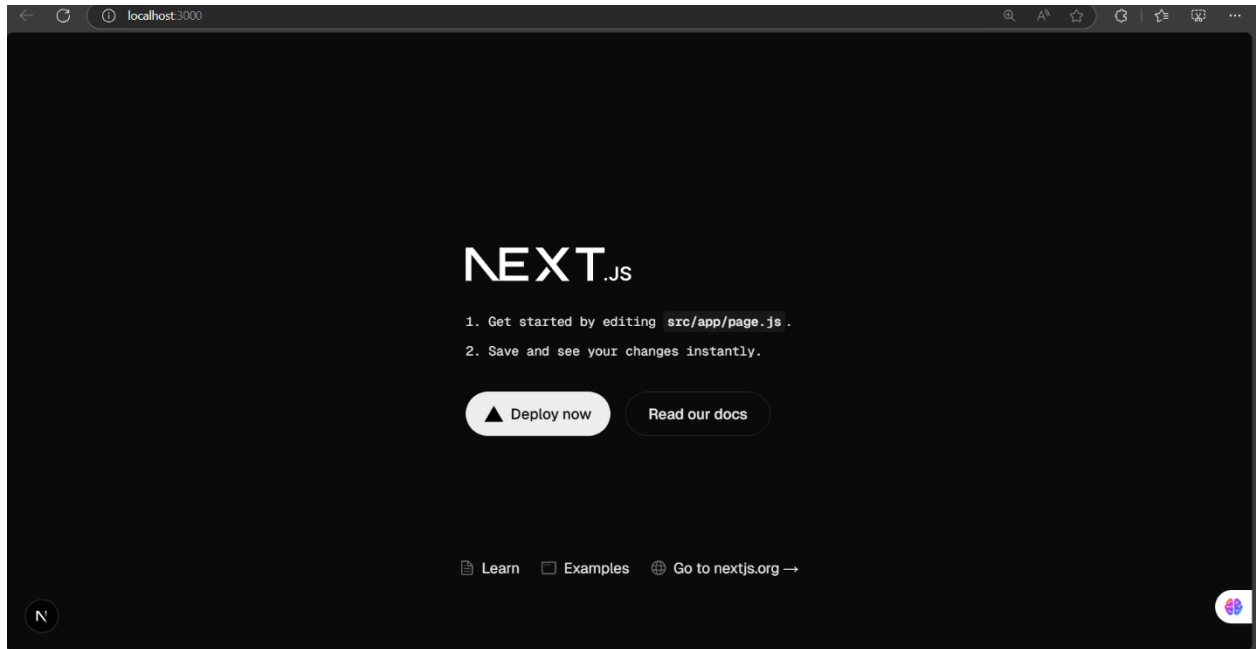
## 6. Running the Project

### 6.1. Start the development server using the appropriate npm command.

- `npm run dev`

### 6.2. Access your project in the browser and verify it runs correctly.

- Open `http://localhost:3000` in a browser.



### 6.3. Document any issues you encountered and how you resolved them.

- Error: Port 3000 in use → Stop other running apps (`npx kill-port 3000`).
- Module not found → Run `npm install`.