

For test dependencies

Run this command inside your /frontend

```
npm install --save-dev jest ts-jest @testing-library/react @testing-library/jest-dom @testing-library/user-event babel-jest --legacy-peer-deps
```

1. Make sure your **frontend/tsconfig.json** looks like this

```
2. {
3.   "compilerOptions": {
4.     "target": "ES2017",
5.     "lib": [
6.       "dom",
7.       "dom.iterable",
8.       "esnext"
9.     ],
10.    "allowJs": true,
11.    "skipLibCheck": true,
12.    "strict": true,
13.    "noEmit": true,
14.    "esModuleInterop": true,
15.    "module": "esnext",
16.    "moduleResolution": "bundler",
17.    "resolveJsonModule": true,
18.    "isolatedModules": true,
19.    "jsx": "react-jsx", // Make sure this is set to 'react-jsx'
20.    "incremental": true,
21.    "paths": {
22.      "@/*": [
23.        "./src/*"
24.      ]
25.    },
26.    "types": [
27.      "jest",
28.      "@testing-library/jest-dom",
29.      "node"
30.    ]
31.  },
32.  "include": [
33.    "src/**/*",
34.    "components/**/*",
35.    "tests/**/*"
36.  ],
```

```
37.   "exclude": [  
38.     "node_modules"  
39.   ]  
40.}
```

2. Make sure your **frontend/package.json** looks like this

```
3. {  
4.   "name": "w3-ass-reactnextjs",  
5.   "version": "0.1.0",  
6.   "private": true,  
7.   "scripts": {  
8.     "dev": "next dev",  
9.     "build": "next build",  
10.    "start": "next start",  
11.    "lint": "next lint",  
12.    "test": "jest",  
13.    "test:watch": "jest --watch",  
14.    "test:coverage": "jest --coverage"  
15.  },  
16.  "dependencies": {  
17.    "next": "15.0.3",  
18.    "react": "19.0.0-rc-66855b96-20241106",  
19.    "react-dom": "19.0.0-rc-66855b96-20241106"  
20.  },  
21.  "devDependencies": {  
22.    "@testing-library/dom": "^10.4.0",  
23.    "@testing-library/jest-dom": "^6.6.3",  
24.    "@testing-library/react": "^16.0.1",  
25.    "@testing-library/user-event": "^14.5.2",  
26.    "@types/jest": "^29.5.14",  
27.    "@types/node": "^20",  
28.    "@types/react": "^18",  
29.    "@types/react-dom": "^18",  
30.    "autoprefixer": "^10.4.20",  
31.    "babel-jest": "^29.7.0",  
32.    "eslint": "^8",  
33.    "eslint-config-next": "15.0.3",  
34.    "identity-obj-proxy": "^3.0.0",  
35.    "jest": "^29.7.0",  
36.    "jest-environment-jsdom": "^29.7.0",  
37.    "postcss": "^8.4.49",  
38.    "tailwindcss": "^3.4.15",  
39.    "ts-jest": "^29.2.5",  
40.    "ts-node": "^10.9.2",  
41.    "typescript": "^5"
```

```
42.  }  
43. }
```

3. frontend/nextconfig.ts

```
import type { NextConfig } from "next";
```

```
const nextConfig: NextConfig = {  
  /* config options here */  
  reactStrictMode: true,  
};
```

```
export default nextConfig;
```

4. frontend/jest.config.ts

```
import type { Config } from 'jest';
```

```
const config: Config = {  
  preset: 'ts-jest',  
  testEnvironment: 'jsdom',  
  transform: {  
    '^.+\\.tsx?$': 'ts-jest', // Handles TypeScript files  
    '^.+\\.jsx?$': 'babel-jest', // Handles JSX files  
  },  
  moduleFileExtensions: ['ts', 'tsx', 'js', 'jsx', 'json', 'node'],  
  transformIgnorePatterns: [  
    'node_modules/(?!(your-package-name|other-package)/)', // If you need to transpile  
    node_modules  
  ],  
};
```

```
export default config;
```

5. frontend/jest.setup.ts

```
import '@testing-library/jest-dom';
```