

## Next.js - TypeScript Support

Next.js, has excellent support for typescript. Following are few steps to enabling typescript in project.

### Create tsconfig.json

Create tsconfig.json in root directory. We're keeping it empty initially. Now start the server.

Next.JS will detect tsconfig.json and show following message on console.

```
npm run dev

> nextjs@1.0.0 dev D:\Node\nextjs
> next

ready - started server on http://localhost:3000
It looks like you're trying to use TypeScript but do not have the required

Please install typescript, @types/react, and @types/node by running:

    npm install --save-dev typescript @types/react @types/node

If you are not trying to use TypeScript, please remove the tsconfig.json f
...
```

### Install typescript

Run the npm install command to install typescript and related libraries.

```
npm install --save-dev typescript @types/react @types/node
...

+ @types/node@14.0.23
+ @types/react@16.9.43
+ typescript@3.9.6
added 5 packages from 72 contributors and audited 839 packages in 27.538s
...
```

### Start Next.js Server

Run the following command to start the server –.

```
npm run dev
```

```
> nextjs@1.0.0 dev D:\Node\nextjs
> next

ready - started server on http://localhost:3000
We detected TypeScript in your project and created a tsconfig.json file for you.

Your tsconfig.json has been populated with default values.

event - compiled successfully
wait - compiling...
event - compiled successfully
```

## Open tsconfig.json

NextJS server has modified the tsconfig.json.

```
{
  "compilerOptions": {
    "target": "es5",
    "lib": [
      "dom",
      "dom.iterable",
      "esnext"
    ],
    "allowJs": true,
    "skipLibCheck": true,
    "strict": false,
    "forceConsistentCasingInFileNames": true,
    "noEmit": true,
    "esModuleInterop": true,
    "module": "esnext",
    "moduleResolution": "node",
    "resolveJsonModule": true,
    "isolatedModules": true,
    "jsx": "preserve"
  },
  "exclude": [
    "node_modules"
  ],
  "include": [
    "next-env.d.ts",
    "**/*.ts",
    "**/*.tsx"
  ]
}
```

## Create hello.ts

Create hello.ts in pages/api directory which will acts as a rest service for us.

```
import { NextApiRequest, NextApiResponse } from 'next'

export default (_: NextApiRequest, res: NextApiResponse) => {
  res.status(200).json({ text: 'Welcome to Tutorialspoint' })
}
```

## Start Next.js Server

Run the following command to start the server –.

```
npm run dev
> nextjs@1.0.0 dev \Node\nextjs
> next

ready - started server on http://localhost:3000
event - compiled successfully
event - build page: /
wait - compiling...
event - compiled successfully
event - build page: /next/dist/pages/_error
wait - compiling...
event - compiled successfully
```

## Verify Output

Open localhost:3000/api/hello in a browser and you will see the following output.

```
{"text": "Welcome to Tutorialspoint"}
```