Let's create a TypeScript project by using create-react-app, then import antd step by step.

We build antd based on latest stable version of TypeScript ( >=4.0.0 ), please make sure your project dependency matches it.

#### **Install and Initialization**

Ensure your system has installed latest version of yarn or npm.

Create a new <u>cra-template-typescript</u> project named <u>antd-demo-ts</u> using yarn.

```
$ yarn create react-app antd-demo-ts --template typescript
```

If you are using npm (we will use yarn in the following instructions, it's ok to replace yarn with npm)

```
$ npx create-react-app antd-demo-ts --template typescript
```

Then we go inside antd-demo-ts and start it.

```
$ cd antd-demo-ts
$ yarn start
```

Open browser at <a href="http://localhost:3000/">http://localhost:3000/</a>, it renders a header saying "Welcome to React" on the page.

## Import antd

```
$ yarn add antd
```

Modify src/App.tsx, import Button component from antd.

Add antd/dist/antd.css at the top of src/App.css.

```
@import '~antd/dist/antd.css';
```

OK, reboot with <code>yarn start</code>, you should now see a blue primary button displayed on the page. Next you can choose any components of <code>antd</code> to develop your application. Visit other workflows of <code>create-react-app</code> at it's <code>User Guide</code>.

antd is written in TypeScript with complete definitions, try out and enjoy the property suggestion and typing check.

Don't install @types/antd.

### **Advanced Guides**

In the real world, we usually have to modify default webpack config for custom needs such as themes. We can achieve that by using <u>craco</u> which is one of create-react-app's custom config solutions.

Install craco and modify the scripts field in package.json .

```
$ yarn add @craco/craco

/* package.json */
"scripts": {
    "start": "react-scripts start",
    "build": "react-scripts build",
    "test": "react-scripts test",
    "start": "craco start",
    "build": "craco build",
    "test": "craco test",
}
```

Then create a craco.config.js at root directory of your project for further overriding.

```
/* craco.config.js */
module.exports = {
   // ...
};
```

#### **Customize Theme**

According to the <u>Customize Theme documentation</u>, we need to modify less variables via loader like <u>less-loader</u>. We can use <u>craco-less</u> to achieve that,

First we should modify src/App.css to src/App.less, then import less file instead.

```
/* src/App.ts */
- import './App.css';
+ import './App.less';

/* src/App.less */
- @import '~antd/dist/antd.css';
+ @import '~antd/dist/antd.less';
```

Then install craco-less and modify craco.config.js like below.

```
$ yarn add craco-less
```

By adding <code>modifyVars</code> option of <u>less-loader</u> here, we should see a green button rendered on the page after rebooting the server now.

We provide built-in dark theme and compact theme in antd, you can reference to Use dark or compact theme.

You could also try <u>react-app-rewired</u> and <u>customize-cra</u> to customize create-react-app webpack config like craco did.

# **Alternative ways**

Follow manual in <u>Adding TypeScript</u> to setup TypeScript development environment if you already create a project by <u>Use in create-react-app</u>.

- Create React apps (with Typescript and antd) with no build configuration
- <u>react-app-rewire-typescript</u>

- <u>ts-import-plugin</u>
- <u>Migrating from create-react-app-typescript to Create React App</u>