

Configuring RTL and JEST in our Application

1. Install RTL using cmd `npm i -D @testing-library/react`
2. Install Jest using cmd `npm i -D jest`
3. Install Babel dependencies using cmd `npm install -D babel-jest @babel/core @babel/preset-env`
4. Configure babel with current node version and to do that create a file `babel.config.js` in project root level and paste below code there.

```
module.exports = {presets: [['@babel/preset-env', {targets: {node: 'current'}}]],};
```

5. configure parcel config file to disable default babel transpilation. Up to this point Parcel bundler has been using babel. Parcel has its own babel configuration and now jest is using babel as per Jest configuration. Jest-babel configuration is overriding parcel-babel configuration. This will create a conflict between Jest and Parcel. We will have to change Parcel behavior to use babel along with jest and to do that create `.parcelrc` under root directory with following configuration.

```
{
  "extends": "@parcel/config-default",
  "transformers": {
    "*.js,mjs,jsx,cjs,ts,tsx": [
      "@parcel/transformer-js",
      "@parcel/transformer-react-refresh-wrap"
    ]
  }
}
```

6. Configure Jest using cmd `npm test -- --init`
7. If jest version is > 28 Install JS DOM library using cmd `npm i -D jest-environment-jsdom`
8. Install `@babel/preset-react` using `npm i -D @babel/preset-react` to make JSX work in test cases.
9. Include `@babel/preset-react` inside babel config.

```
module.exports = {
  presets: [
    ["@babel/preset-env", { targets: { node: "current" } }],
    ["@babel/preset-react", { runtime: "automatic" }],
  ],
};
```

`@babel/preset-react` is helping our testing library to convert JSX code to html so that it will read properly

10. Install `@testing-library/jest-dom` using `npm i -D @testing-library/jest-dom`
11. **Optional** - Jest code Intellisense - `npm install @types/jest`

We have successfully configured RTL, JEST, babel & parcel in our project

