

React

global installation

- **this has to be done only once**
- install babel globally from any directory

```
sudo npm install -g babel-cli  
sudo npm install -g create-react-app
```

- install live-server globally from any directory

```
sudo npm install -g live-server
```

- inside the application directory install required babel preset packages
-

create a project

- create the project directory structure

App1

- **public**

The public directory will hold the final version (compile) of the website

- **scripts**

The JS file will go in scripts directory

- **css**

The css files will go in css directory

- **index.html**

Website html file(s)

- **src**

The JS file(s) containing the react code

- install required babel packages in the project directory

```
npm install babel-preset-env babel-preset-react
```

- add index.html page in public directory

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0"
  />
  <title>Gaana</title>
</head>
<body>
  <h1>Welcome to My Gaana</h1>

  <div id="app"></div>

  <script
    src="https://unpkg.com/react@17/umd/react.production.min.js"
```

```

    crossorigin
  ></script>
  <script
    src="https://unpkg.com/react-dom@17/umd/react-dom.production.min.js"
    crossorigin
  ></script>
  <script src="scripts/app.js"></script>
</body>
</html>

```

- create a file named **component.js** in src directory with following contents

```

// template to be rendered
const template = <h1>Song Info Component</h1>

// the placeholder where the template will be rendered
const root = document.getElementById('app')

// render the template into the root element
ReactDOM.render(template, root)

```

- compile the react code to the previous generation js code

```

babel src/component.js --out-file public/scripts/app.js --
presets=env,react

```

- start the project

```
live-server public
```

component having array of values

```

const songs = ['song-1', 'song-2', 'song-3', 'song-4']

const template = (
  <div>
    <h3>songs</h3>
    {
      // iterating the songs array
      // getting each song at a time
      // returning an item having the song name in it
      songs.map((song) => {
        return <div>{song}</div>
      })
    }
  )

```

```
</div>  
)
```

create-react-app

- create project

```
npx create-react-app <application name>
```

- run the project

```
cd <project name>  
npm start
```