**How to create react application**

**Setting up the Environment:**

1. **Create project folder**
   1. Ex. mkdir <projectname>
   2. cd <projectname>
2. **Create package.json file**
   1. Using command, npm init – we have to give necessary input about our peoject.
   2. Manually we have to create the file. Content we have to copy from internet.
3. **Install webpack**
   1. Ex. npm i webpack –S. It will install some node modules.
   2. Create webpack.config.js file via cli or manually. Content we have to copy from internet.
4. **Important things in webpack.config.js**
   1. Required webpack and path modules
   2. Create config class with entry & output objects
   3. Exports config class.
5. **Setup babel loader**
   1. Ex. npm i babel-loader babel-preset-es2015 babel-preset-react -S it will install some more modules in our project.
   2. Create a .babelrc file with { “presets” : [“es2015”, “react”]. It will generate jsx from .js files for our project.
   3. Now, we have to add “babel module” info to webpack.config.js with loaders array info.
6. **Install react and react-dom modules**
   1. Ex. npm i react react-dom –S it will install react related modules in our project.
7. **Folder structure**
   1. **<projectname> -** *project folder*
      1. Package.json
      2. Webpack.config.json
      3. .babelrc
      4. src [folder]
         1. **app [***folder for development***]**
            1. components [folder]
            2. pages [folder]
            3. reducer [folder]
            4. sass [folder]
            5. index.js [it will call for react-dom modules to render our project]
         2. **public [***folder for production (live) no dev. Here. This managed by babel with webpack.***]**
            1. images [Just create folder]
            2. js [Just create folder]
            3. css [Just create folder]
            4. index.html [with basic html structure]
8. **Run the project**
   1. **Execute way 1:** 
      1. First, we have to bundle/compile our project using ‘webpack’ command in terminal.
      2. Now, bundle.js will be created beneath public folder. We can open our index.html on our browser and see our output.
   2. **Execute way 2:**
      1. First, we have to bundle/compile our project using ‘webpack’ command in terminal.
      2. Now, bundle.js will be created beneath public folder.
      3. Then, we can start our local server using ‘npm run start’. For this we have to install some node module in our projects. Those are: npm install webpack-dev-server --save-dev, npm install --save-dev webpack-dev-middleware, npm install --save-dev webpack-hot-middleware. Then, add devServer object to our project webpack.config.js. ex. devServer: { inline: true, contentBase: ‘index.html’ path, port: 3000 }
      4. Final see output on localhost:3000(port) domain.
9. Finally execute our project happily..!!

**How to add style{css, sa?css, less} to my react application**

* + - 1. **Setting up:**
         1. install style & css & sass | less loaders. Ex. npm install style-loader css-loader sass-loader node-sass –save-dev.
         2. Add loader object to webpack.config.js. ex. { test: /\.scss/, loader: 'style-loader!css-loader!sass-loader' }.
         3. Import css/scss files into our .jsx using require(‘./example.scss’);