**REACT**

* Java script library
* Group of reusable components
* Speed due to virtual DOM (changes only changed component). That is nav and header footer mostly does not change only content

**Command line commands:**

1. Pwd->full path name
2. Ls->list of directories
3. Mkdir->new directory
4. Cd->move into folder
5. cd..->backwards move outside folder
6. clear-> clear console
7. npm init->create package.json(manifest file), list dependencies
8. npm install <package name> --save -> install package locally and add to package.json. –save to add to package.json in npm version <5.0
9. npm install <package name> -g -> install globally
10. npm install <package name> --save-dev=> only for development
11. npm create-react-app <app name> =>to create react app with folder structure
12. npm start=> run react app. Start development server
13. npm run build -> bundles app into static files

**Babel => website which converts to new js**

**Folder structure:**

Node modules=> all packages installed and dependencies

Public=> index.html, css, logo

Index.html=> the root element <div id=”root”></div> is present

Build=>after npm run build .used for deployment

Src=> App.js(root component) and all component , css and index.js

.gitignore=> folder and files to not be added to git

Remove all needless files………logo…..

**RULES:**

1. Attributes of tags in **camelCase** => onClick
2. All components **first letter** capital => App
3. **All tags enclosed** inside single element and only one element to be returned
4. **className** instead of ~~class~~
5. instead of div for wrapping all element can also use <**React.Fragment**> which will wrap and return as single element but does not reflect in html as a div.
6. All element must be **closed** even those without close tag => <div></div> or <br/> or <App/>
7. {} inside component to start javascript inside html tags => <div> hello {user\_name}</div>
8. {{}} inside tags for styles=> <div style={{‘color’:’red’,’backgroundColor’:’yellow’}}>
   1. No – only camelCase
   2. No ; for end of line , for separating styles
9. If value undefined only empty (null) returned inside {}
10. While building component for each element of array must give attr key as unique value.
11. Destructing object

Eg: <App a=’one’ b=’two’/>

* 1. Can be done in parameter itself 🡪App=({a,b})=>{}
  2. Can be done inside function 🡪App=(props)=>{const {a,b}=props;}
  3. Can be done from tag itself 🡪 const p={a:’a’,b:’b’}

<App {…p}/>

* 1. The name must be same as object keys => const {l,b}=props 🡪 undefined since props has only a=’one’ and b=’two’

1. **ALL EVENTS** supported by REACT => React events in docs
2. **Import and export**
   1. Export <data>

Eg:

Const a=’a’;

Var b=’b’;

Export default {a:a,b:b};

* 1. Only one default export per file……..can be imported by any name
  2. If not default export ……then must import with same name
  3. Import {data} from ‘file path’;

1. **Hooks**
   1. UseState
   2. useEffect