

# React

- JS library to build user interface
- developed and donated by facebook (meta)
- facebook has made the react open source in 2013

## commands

- install yarn

```
> npm install -g yarn
```

- create a new project

```
> npx create-react-app newapp
```

- run a react application

```
> cd newapp  
> yarn start
```

- test a react application

```
> yarn test
```

- build the react application

```
> yarn build
```

## file hierarchy

- **node\_modules**
  - contains the node packages required to run the react application
- **public:**
  - contains the static data
  - e.g. css, index.html, images
- **src:**
  - contains the application source code
  - index.js:
    - entry point to the application

- application starts with index.js
- App.js
  - contains the first/startup component
- **.gitignore**
  - contains the list of files/directories which are not needed to add to the git repository
- **package.json**
  - contains the dependencies
- **README.md**
  - contains the read me instructions for the application
- **yarn.lock**
  - contains the packages versions used in the application
  - will get automatically created

## component

- reusable entity defined by react
- created by
  - using a function
  - using a class
- may represent
  - an entire page
  - a part of a page

## react routing

- documentation
  - <https://reactrouter.com/docs/en/v6>
- installation

```
> yarn add react-router react-router-dom
```

## blogs

- create and configure the application

```
> npx create-react-app blogs
> cd blogs
> yarn add react-router react-router-dom axios moment moment-timezone
```

- packages
  - react-router and react-router-dom
    - needed for adding page/component switching functionality
  - axios
    - used for calling the REST apis

- moment and moment-timezone
  - used for time/timezone conversion