



# Developing the Front end Application Using ReactJS and Bootsrtap.

WebApplication

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## Abstract

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Follow the Social media networking, we developed a technology based on the reactJS called LogiqueCode.

Our mission is to build the best way, on that new developers can work and implement their own thought by easy.

LogiqueCode, Development process is building an application that serves. The application is based on ReactJS with React framework. In the project we didn't use all concepts and technologies that react need to build the project. This includes the relevant background such as introduction to React project, how to use bootstrap with react.

**Keywords:** Web application development, ReactJS, and Bootstrap.

## Table of Content

1. Introduction .....	0.1
2. Knowledge Base .....	0.2
3. Project Objective .....	0.3
4. Requirement .....	0.4
5. Project Architecture .....	0.5
6. Methodology .....	0.6
7. Development .....	0.7
8. Testing .....	0.8
9. Project Assessment .....	0.9
10. Conclusion .....	0.10

## 0.1 Introduction...

As the following technology. Now a days every person be come a cloud based user, as the use of network technology Users are forwarding the data by technology.

User forwarding the data not only on the mobile app, on web application also. As for the demand user need same interface with application and web application as well. Company's are providing the facility as for user need. In India there are many privet limited company who providing the facility with different - different technology.

New technology's are going on the demand to build the project and impalement the developers idea to the real world project.

As the same we are building the react technology on the demand and user need.

## 0.2 Knowledge Base...

As for the requirement the technology be come very fast to response. Such technology which is developing the website such as web-application, is going to use a framework to do more effect work and implement the developers idea by very easy.

In the short term, the framework is giving us very efficient way to create the project and implement them. Such as they are giving, more auto generate file and folder which is helpful for development. They are giving database connection, they are not providing configuration with data base but yes, by the framework we can configure the database by easy.

As for the framework suggested you can find the more effective solution on Stack overflow, medium and on the google also.

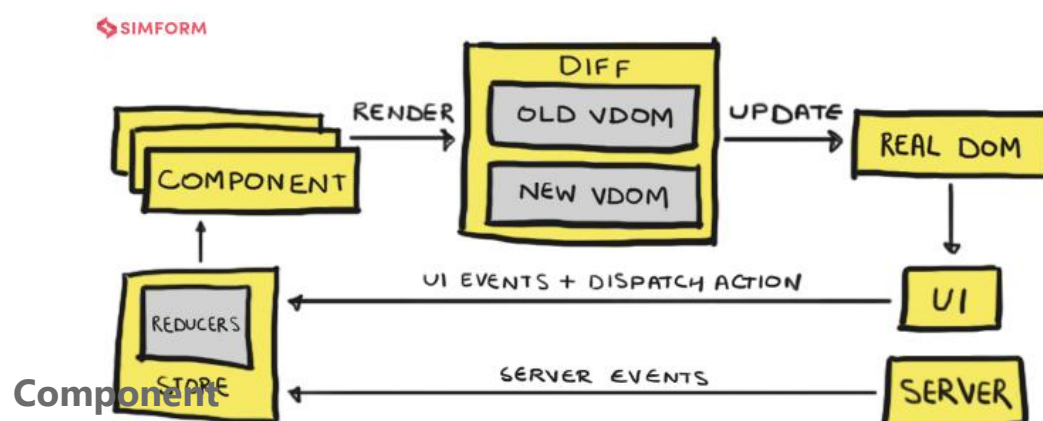
By the PDF we are developing the project based on the react framework. That is very use full and industry trending technology. now a day there are many company who is moving to the react framework.

There are something about thee react if you don't understand don't be sad we will cover all these thin by the react documentation.

Just learn more about react <https://www.geeksforgeeks.org/react-js-introduction-working/>

## Declarative...

React makes it painless to create interactive UIs. Design simple views for each state in your application, and React will efficiently update and render just the right components when your data changes.

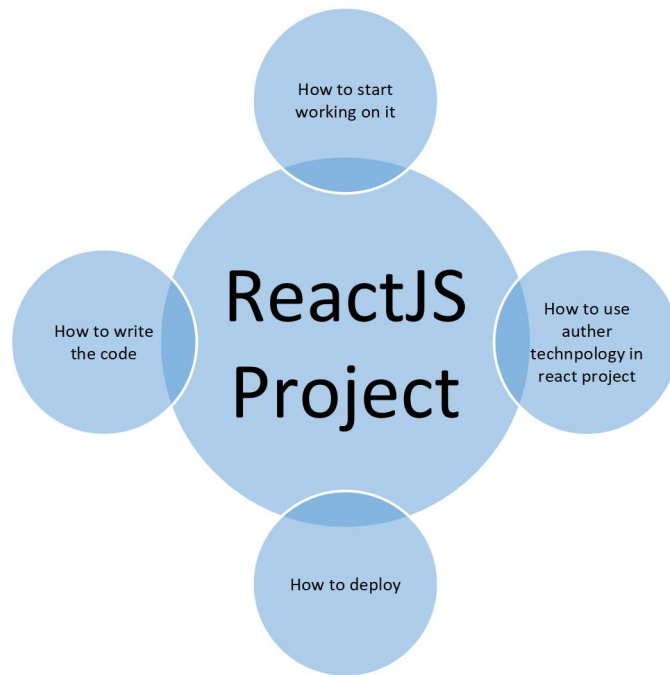


Build encapsulated components that manage their own state, then compose them to make complex UIs.

Since component logic is written in JavaScript instead of templates, you can easily pass rich data through your app and keep state out of the DOM.

In the simple way we can say we are using some part if iframe in html tag.

**NOTE:** by the end of the document we will understand the thing's



### 0.3 Project Objective...

the purpose of the project is divided in to two certain idea.

1. Learn reactJS.
2. Some company requirement as intern.

#### 1. Learn ReactJS...

Learning reactJS is one of the best way to become a front-end developer. Because the reactJS technology is used for developing the front-end part of the web application, if you want to become a full-stack developer you can start working on node.js for back end.

As for rearmament we are going to use react for front-end

In the project we use HTML External CSS Bootstrap, JQuery,

By the bootstrap I user the some CSS class for the styling of the web page

By the HTML is use more tage for creating the page.

Once we talk about the photos, the answer is yes we use many photo by SVG file.

**SVG file:** it is the pager of sticker and PNG or JPG file, with different extension call SVG.

As you can see on the web-page are some, CSS Hover that is coming by scrolling the web-page, but that Is not an hover actually. That is happening by the external animation.

### 0.4 Requirement...

if you have plane to create the react web application you don't have to know much about the react.

Some developers saying reactJS ia the framework and some developer is saying it the java script library. Its is depend upon you what you want to say.

If you want to build the best career in the reactJS field, you need to have knowledge about the HTML, CSS and java script.

If you want to use Bootstrap you can build the react app by very easy. Yes you can use MBD bootstrap to in the react project.

Once you have dissed to use MBD bootstrap in the react project, you do one thing, Just go to the <https://mdbootstrap.com/docs/react/getting-started/installation/> and download the MBD package. And start working on it

If you don't want to use bootstrap to can do it.

Now the time is come to crate user interface (UI) with custom code.

## Technology used to create <LogiqueCode.com> WebApp:

1. HTML
2. CSS
3. Bootstrap
4. ReactJS
5. JQuery
6. Git and github

## GIT UNDERSTANDING...

### We are hosting our code on the <github.com> space :-

1. Github provides the free space or '**Repository**' to host the code.
2. The project owner can create several branches to tackle the source of code.
3. We can easily share the code through <Github.com>
4. We can easily merge the code of multiple programmers on <Github>.
5. Some useful git commands are:
  - **git init** : to initialise the repository
  - **git clone <project-url>** : to clone the specific project
  - **git add .** : This command is used to add the changes that have been made to be done
  - **git commit -m <some-message>**: Commit all the changes to the git, it simply means <git commit> use to save the changes in the code.
  - **git push origin <branch-name>**: This command is used to push the code on Github
  - **git pull origin <branch-name>** : this command is used to pull the code from Github
  - **Note:** <https://www.atlassian.com/git/tutorials/using-branches/git-merge>
  - The above link is used to <merge> the code

### How to Merge Code of Two Programmers on Git...

- Here I give one example of how to manipulate with <github> to 'push' and 'pull' the code.
- Suppose two programmers(Prog1 and Prog2) are doing code on the same project
- within the same branch(main branch).
  - ✓ Initially **Prog1** pushed the code onto the **main branch**.
  - ✓ **Prog2** downloads **Prog1's** code base from **Git main branch**..
  - ✓ After that **Prog2** update the changes in the code
  - ✓ After making changes in the code, e.g.:-(**home section** and **service section**), upload that code to the **main branch**.
  - ✓ After that will verify both of the code is merged and we have a common code to work with.

## Software Requirements...

- ✓ Code Editor like **Notepad++**, **VSCode**, **Sublime text editor**, etc
- ✓ **Node.js** Should install into your machine.
- ✓ Any Browser like **Firefox**, **Chrome**, **MSEdge**, etc
- ✓ (optional) If you are using **Windows OS**, then install the **git bash** to run the **npm** commands
- ✓ If you are using **Ubuntu OS**, then you can use your 'ubuntu-terminal' as well.

Below link is for Creating and Adding SSH key to clone the code as https from <github>:

<https://youtu.be/Z3ELWci34cM>

## Commands to install Nodejs, NPM and to start React project:

<https://www.digitalocean.com/community/tutorials/how-to-install-node-js-on-ubuntu-20-04>

- \$ sudo apt update
- \$ sudo apt install nodejs
- \$ node -v
- \$ sudo apt install npm

**Note 1:** In Windows, you can use **git bash** also to run the above commands.

**Note 2:** In Ubuntu, you can use the **terminal**

## 0.5 Project Architecture...

As the Project Architecture we are using HTML for web page text and Bootstrap class for the styling, and also we are using some external CSS for more effective look.

## 0.6 Methodology...

The term Methodology is done by two team member Vishal kuamr and Shubham sankar

While deigning the web page er use HTML for the development and CSS for the styling.

Project:-

First we need to create the project : just follow the step to create the project,



Step link:- <https://create-react-app.dev> on this link you get a video inside the specific component. Just follow them.

Once we created the project, I started working on the reactJS technology, I created the page call index.js after the project creation.  
I created a section call Components inside the public src folder.

As you can see in the picture, whatever the thing's that I have created for the project.



As you can see inside the src folder there are some sub folder call components.  
And then inside the components folder still there are sub folder call NAV. and still inside the nav folder there are sub folder call NavBar, NavBarMenu and NavBaeSearch

As we know the react project is beased on the component work.

**NOTE:** in the Normal HTML we can start working on the navigation section by creating the NAV section and inside the NAV section we will create the DIV as for the rearmament.

but inside the react project we are creating the different different component for different different section.

As inside the NavBar there is a file called index.js that is react component for the logo by default.

As inside the NavBarMenu still there are file call index.js also that is Navigation menu like :  
Home / about / contact etc..

As inside the NavBarSearch still there are file call index.js also that is Search Component

This is example.



Now inside the component folder we will create the more folder and file like.

Home folder with home.js file  
About folder with about.js file  
Contact folder with contact.js file

Now the main part is come into the picture, how react will know, how is the file have to render on the screen while clicking on the about icon ( which is in the navbar menu )

**Note :** app.js is the file which is created by the react that play role to configure the path of the urls

```
import './App.css';
import Home from './WebSection/Home';
import Contact from './WebSection/Contact';
import Navbar from './WebSection/Navbar';
import About from './WebSection/About';
import Footer from './WebSection/Footer';
import Service from './WebSection/Service';
import Error from './WebSection/Error';
// import { Route, Switch } from 'react-router-dom';
// import { BrowserRouter as Router, Switch, Route, Link } from 'react-router-dom';
import { Switch, Route } from "react-router-dom";

function App() {
  return (
    <>
    <Navbar/>
    <Switch>
      <Route exact path="/" component={Home}/>
      <Route path="/About" component={About}/>
      <Route path="/Contact" component={Contact}/>
      <Route path="/Service" component={Service}/>
      <Route component={Error}/>
      { /* </Routers>
    </Router> */ }
    </Switch>
    <Footer/>
    </>
  );
}
export default App;
```

In this Picture as can see the app.js code. Just read and understand. Them, this nothing but rendering the page with different different urls path.

In the app.js we are importing all the files and folder from src folder.  
If you face any problem while creating the route function you can follow the link:-  
[https://www.youtube.com/results?search\\_query=route+in+react+js](https://www.youtube.com/results?search_query=route+in+react+js)

After that once will click in the about icon it will redirect to the xyz.com/about

Now the time come to code the web page.

Creation if home page :- [logiquecode.com/](http://logiquecode.com/)

There are many many way to create the react page, such as while using the function component, while using the class component. But class component to create the page.

Note : once you are creating the page just remember you need to create the many component for the different different UI,  
Such as you need to create a component for the 1<sup>st</sup> heading, 2<sup>nd</sup> component for another body section.

But in the project, I created only one component call home. And inside the component I waited all the code of home page.

Home page:-

Im using bootstrap and also using some external CSS,

If you want to use them you, just code the html code inside the home.js

And import all the bootstrap CSS inside the index.js which is inside the public folder not inside the src component.

If you want to use External CSS for the home page. You can create the class and ID inside the app.css which is inside the public folder also.

And use that class and ID inside the home.js. Yes you can use that class and ID in different different file also. Such as about.js and etc..

If you want to know more about it, you can follow the link:- <https://css-tricks.com/different-ways-to-write-css-in-react/>

Rest all the things come from the HTML.

Typically I created a Function component for the home.js.

```
import React from 'react';
export default function Home() {

  return (
    <div>
    </div>
  )
}
```

Inside the <div> we need to write the html code to render the content on the web page.

Like:- on the web page the content will be “ this will render on the web page ”

```
import React from 'react';
export default function Home() {
```

```
return (  
  <div>  
    <h1>This is will render on the web page</h1>  
  </div>  
)
```

```
}
```

Yes you can use class component too.

Follow the link to use class component:- <https://reactjs.org/docs/components-and-props.html>

I just follow all this concept for the about and service page as well.

But there is more important thing's that you should know about, when you want to use animation activity on the web page for attractive look you can use, But once you are creating the component for the page, you will face more problem while using the animation on the web page.

Solution:- you need to solve the route path.

Just follow the step:- <https://stackoverflow.com/questions/27928372/react-router-urls-dont-work-when-refreshing-or-writing-manually/>

This will help you to thing.

1. How router function is working.
2. And what are the step to work on the animation.

Inside the project im using Contact form.

And in the conation from im using some AWS Configuration for user response.

Im creating the from using the HTML tag and then need to crate the server for the SMPT server.

Once im creating the Contact from need to create the server and then need to configure them with SMPT server.

But inside the project im using AWS as a SES service for the Contact form.

Once you are plane to use SES for the Contact form,

You need to know about the SES. SES is working on the Getaway.

We need to Host the Project with the Domain, yes you can host the project on different platform, its no necessary to host the project on AWS. once we are using the SES service, need to have to proper domain.

We need to Creat the IAM Role with lambda integration for the more detale You can follow the ink- <https://www.freecodecamp.org/news/how-to-receive-emails-via-your-sites-contact-us-form-with-aws-ses-lambda-api-gateway/>

Issues that we faced during the development of <LogiqueCode.com.>

## Responsiveness of LogiqueCode.com...

1. Both **Bootstrap** Classes and **CSS** Media Queries are used to make this WebApp Responsive.

- **@media query** used at 450px, 320px for mobile-view.
- **@media query** used at 1024px, 1200px, for laptop-view and more larger screen view.

2. And fixed the Font-size, text-alignment, margin and padding of the content besides the all media queries.

we faced during the development of LogiqueCode.com...

Installing **react-router-dom**.

1. This component must have version-compatibility during the installation.
2. **Definition: react-router-dom** is an npm package that enables you to implement **dynamic routing**.
3. <https://youtu.be/WNU1BEZljxg>
4. [https://www.youtube.com/watch?v=1N\\_Vh0bRK3c](https://www.youtube.com/watch?v=1N_Vh0bRK3c)
5. Above two links are useful to understand React-Routing.

**Bottom Navigation Menus** Click and back to top of page.

1. When we click on the **bottom-navigation-menus** then Page should redirect to the Top page but this causes a problem. To overcome this problem, I followed the link below.
2. <https://stackoverflow.com/questions/33188994/scroll-to-the-top-of-the-page-after-render-in-react-js>
3. After following the above link, the **bottom-navigation-menus** are working as per requirement.

**THNK YOU**