REACT JS

MANUAL BOOK

By

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Northern City

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Course Outline

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- Components
- Props
- Click Event
- Assignment-1

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- useEffect
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- Dynamic Routing
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Week-1

Installation and Setup

- Video lesson -1

Components

- Video Lesson -2

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Click Event

- Vide Lesson - 4

Assignment-1

Installation and Setup

🎬 Video Lesson 1

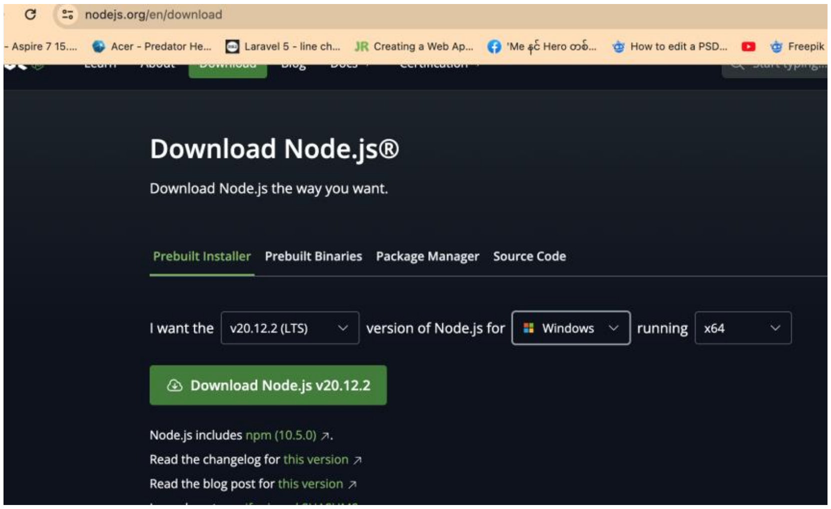
Installation and setup

- Node js installation
- VSCode installation
- Running the first application

Node JS Installation

React application ကိုရေးဖို့ရာ ကိုယ့်ရဲ့ကွန်ပျူတာမှာ Node JS ကို အရင် install လုပ်ရပါမယ်။ အောက်က download link ကို သွားပြီး Node JS ကို ဒေါင်းလုပ်ဆွဲရပါမယ်။ ကိုယ်အသုံးပြုနေတဲ့ ကွန်ပျူတာမှာ Node JS install လုပ်ပြီးသားဆိုရင် တော့ ဒီ installation step ကိုကျော်လိုက်ပါ။

www.nodejs.org/end/download



Download Node.js®

Download Node.js the way you want.

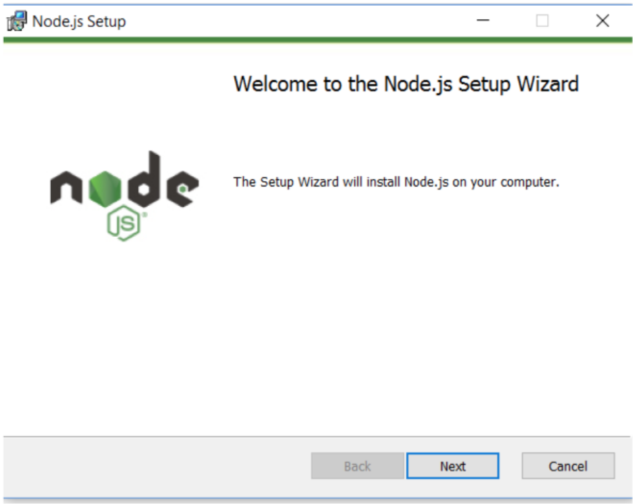
I want the v20.12.2 (LTS) version of Node.js for Windows running x64

Node.js includes npm (10.5.0) ↗.

Read the changelog for this version ↗

Read the blog post for this version ↗

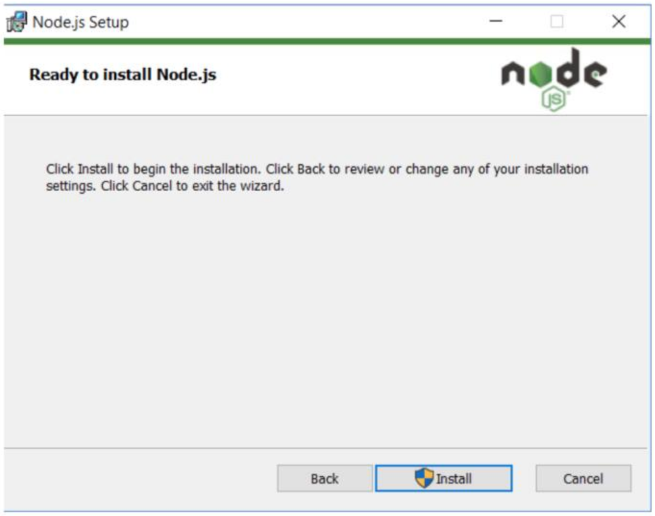
Download ဆွဲပြီးသွားရင် Computer ရဲ့ download folder ကိုသွားပြီး Node JS setup file ကို download click ခေါက်ပြီး အောက်ပါအတိုင်း installation လုပ်ရပါမယ်။



Node.js Setup

Welcome to the Node.js Setup Wizard

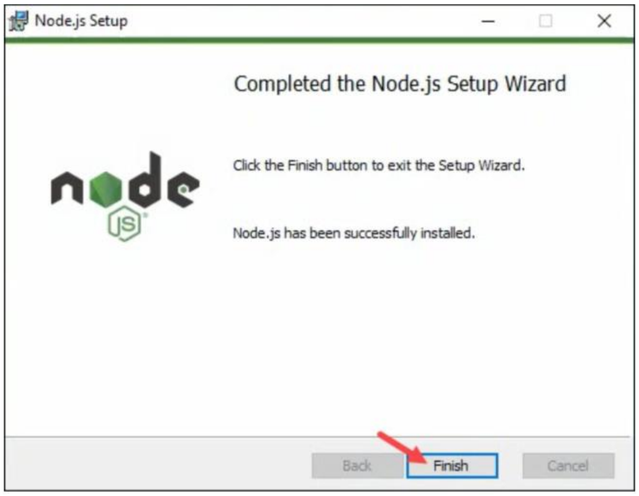
The Setup Wizard will install Node.js on your computer.



Node.js Setup

Ready to install Node.js

Click Install to begin the installation. Click Back to review or change any of your installation settings. Click Cancel to exit the wizard.



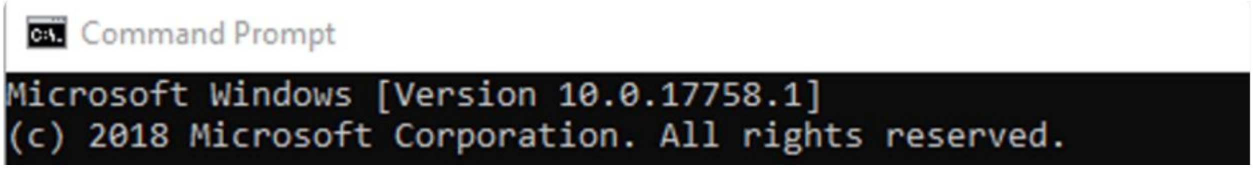
Node.js Setup

Completed the Node.js Setup Wizard

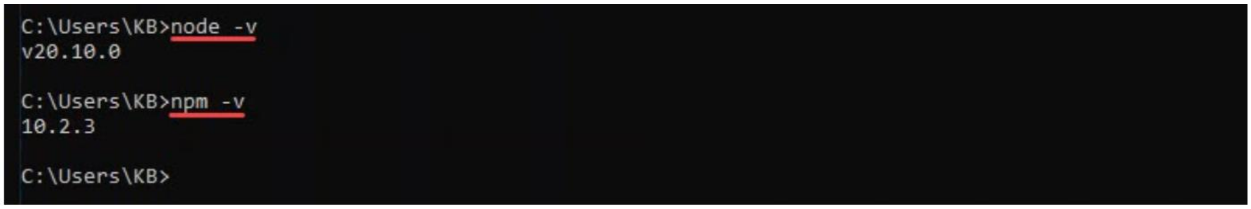
Click the Finish button to exit the Setup Wizard.

Node.js has been successfully installed.

Node JS installation ပြီးသွားရင် Node JS version နဲ့ npm version ကို command mode မှာ အောက်ပါအတိုင်း ကြည့်လို့ရပါတယ်။



```
Microsoft Windows [Version 10.0.17758.1]
(c) 2018 Microsoft Corporation. All rights reserved.
```

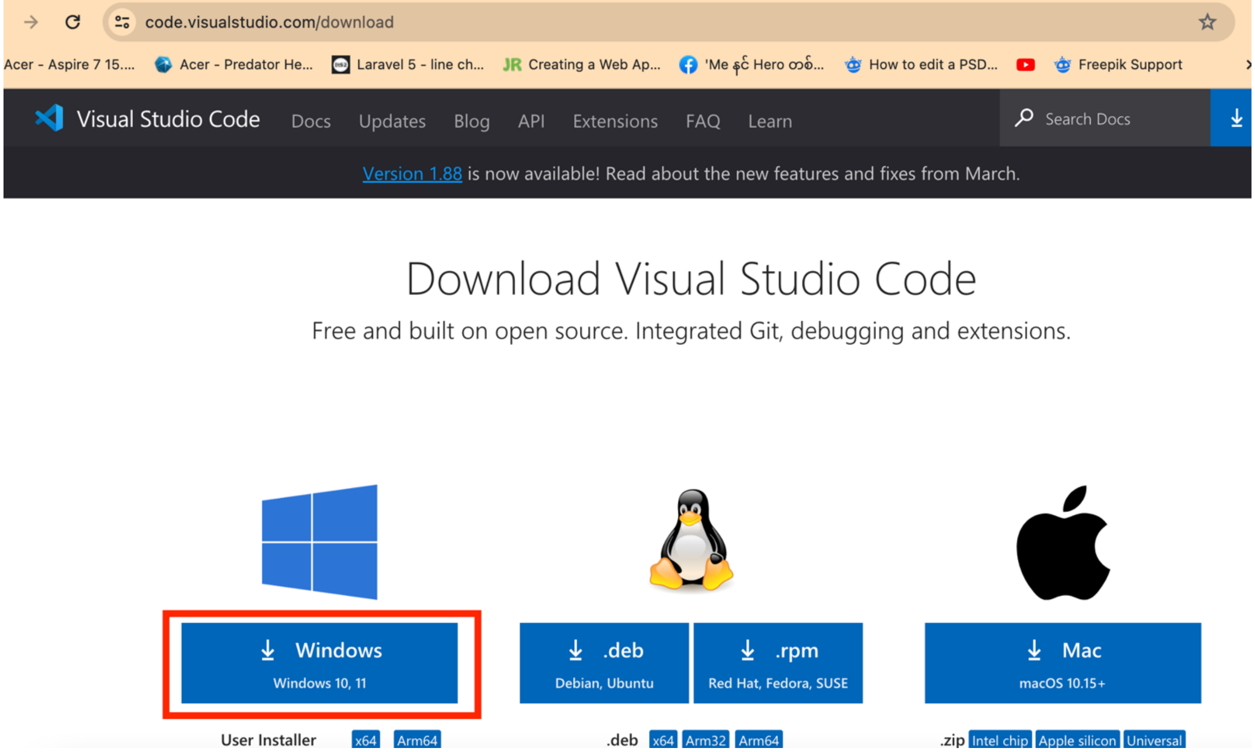


```
C:\Users\KB>node -v
v20.10.0

C:\Users\KB>npm -v
10.2.3

C:\Users\KB>
```

Node JS download လုပ်ပြီး installation ပြီးသွားရင် တော့ vs code ကို install လုပ်ရပါမယ်။

VSCode Installation

https://code.visualstudio.com/download



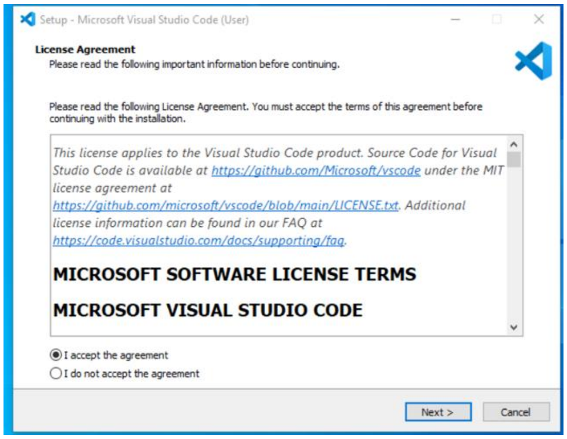
code.visualstudio.com/download

Version 1.88 is now available! Read about the new features and fixes from March.

Download Visual Studio Code

Free and built on open source. Integrated Git, debugging and extensions.

VS Code download ဆွဲပြီးသွားရင် အောက်ပါအတိုင်း install လုပ်ပါ။



Setup - Microsoft Visual Studio Code (User)

License Agreement

Please read the following important information before continuing.

Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation.

This license applies to the Visual Studio Code product. Source Code for Visual Studio Code is available at https://github.com/Microsoft/vscode under the MIT license agreement at https://github.com/microsoft/vscode/blob/main/LICENSE.txt. Additional license information can be found in our FAQ at https://code.visualstudio.com/docs/supporting/faq.

MICROSOFT SOFTWARE LICENSE TERMS

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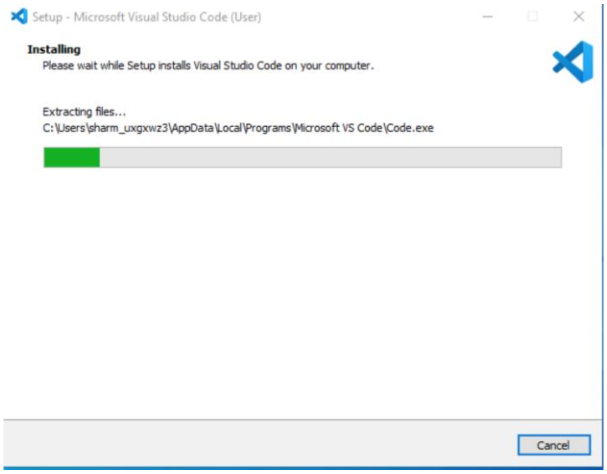
● I accept the agreement

○ I do not accept the agreement

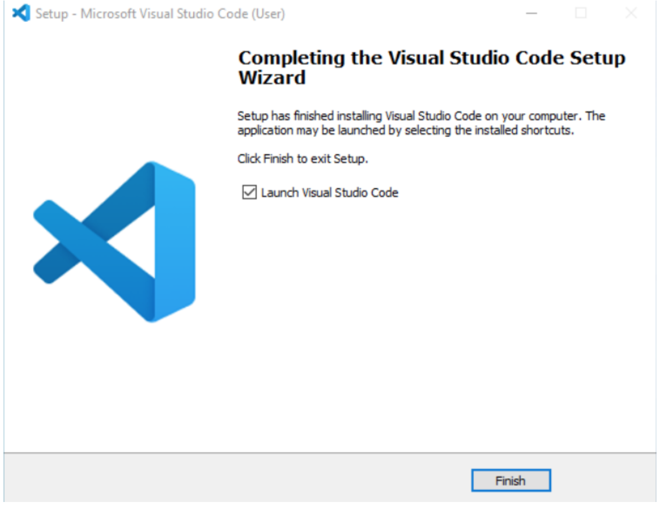


Setup - Microsoft Visual Studio Code (User)

Installing

Please wait while Setup installs Visual Studio Code on your computer.

Extracting files...
C:\Users\sharm_uxgxwz3\AppData\Local\Programs\Microsoft VS Code\Code.exe



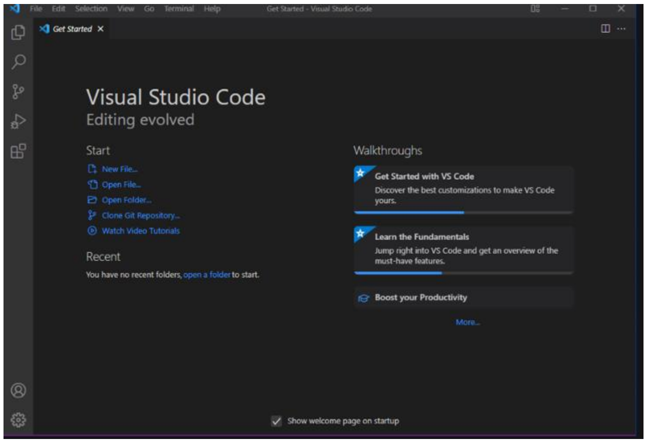
Setup - Microsoft Visual Studio Code (User)

Completing the Visual Studio Code Setup Wizard

Setup has finished installing Visual Studio Code on your computer. The application may be launched by selecting the installed shortcuts.

Click Finish to exit Setup.

☑ Launch Visual Studio Code



Get Started - Visual Studio Code

Visual Studio Code
Editing evolved

Start

Recent

You have no recent folders, open a folder to start.

Walkthroughs

Get Started with VS Code
Discover the best customizations to make VS Code yours.

Learn the Fundamentals
Jump right into VS Code and get an overview of the must-have features.

Boost your Productivity

☑ Show welcome page on startup

လိုအပ်တဲ့ software Installation တွေသွင်းပြီးသွားပြီဆိုရင်တော့ react application ကို စရေးလို့ ရပါပြီ။

Running the first application

React Environment setup ကို အောက်ပါအတိုင်း ၂ မျိုး တည်ဆောက်နိုင်ပါတယ်။

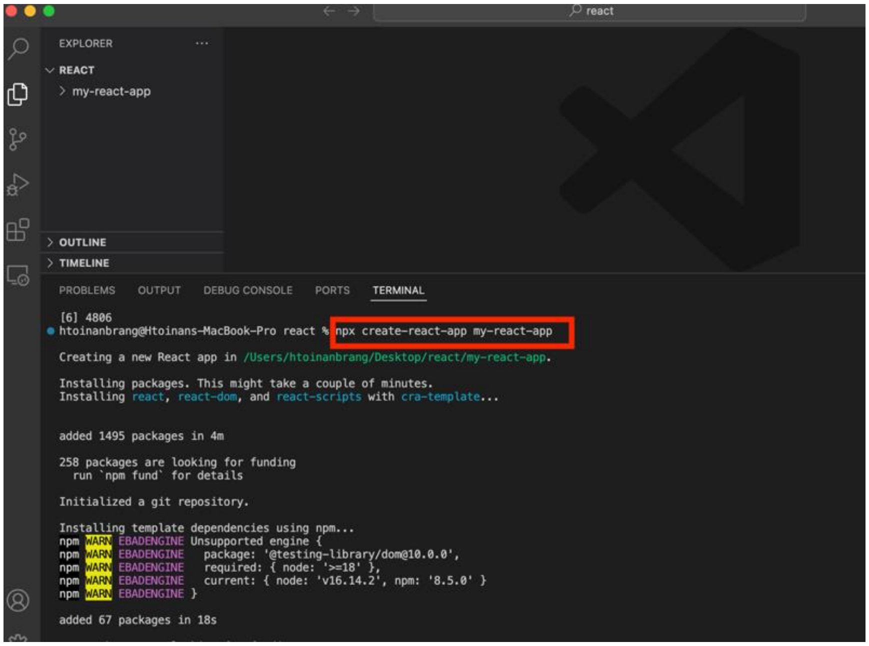
i) Webpack နဲ့ babel သုံးပြီး Manual setup ပြုလုပ်နိုင်ပါတယ်။

ii) create-react-app command နဲ့ auto setup ပြုလုပ်နိုင်ပါတယ်။

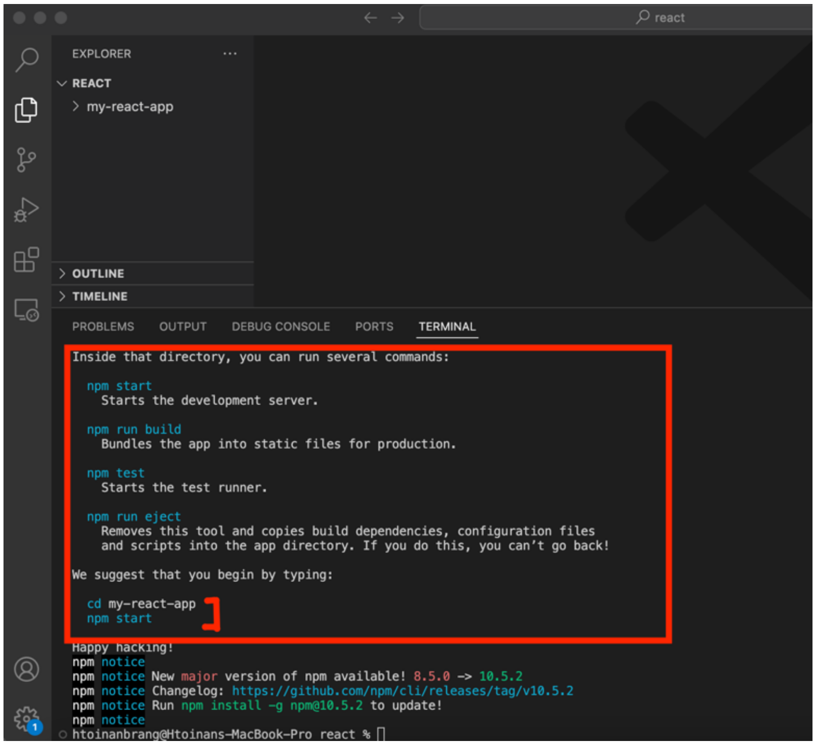
ဒီ စာအုပ်ထဲက lesson တွေမှာ တော့ create-react-app command ကို အသုံးပြုသွားမှာ ဖြစ်ပါတယ်။ auto setup ဖြစ်တဲ့အလျှောက် အချိန်ကုန်သက်သာပြီး configuration လုပ်ရတာ လွယ်ကူသွားပါမယ်။ ဒီ command ကို သုံးတော့မယ်ဆို Node JS ကို install လုပ်ထားဖို့တော့ လိုပါတယ်။

Command:

```
npx create-react-app my-react-app
```



```
[6] 4806
htoinanbrang@Htoinans-MacBook-Pro react % npx create-react-app my-react-app

Creating a new React app in /Users/htoinanbrang/Desktop/react/my-react-app.

Installing packages. This might take a couple of minutes.
Installing react, react-dom, and react-scripts with cra-template...


added 1495 packages in 4m

258 packages are looking for funding
  run `npm fund` for details

Initialized a git repository.

Installing template dependencies using npm...
npm WARN EBADENGINE Unsupported engine {
npm WARN EBADENGINE   package: '@testing-library/dom@10.0.0',
npm WARN EBADENGINE   required: { node: '>=18' },
npm WARN EBADENGINE   current: { node: 'v16.14.2', npm: '8.5.0' }
npm WARN EBADENGINE }

added 67 packages in 18s
```



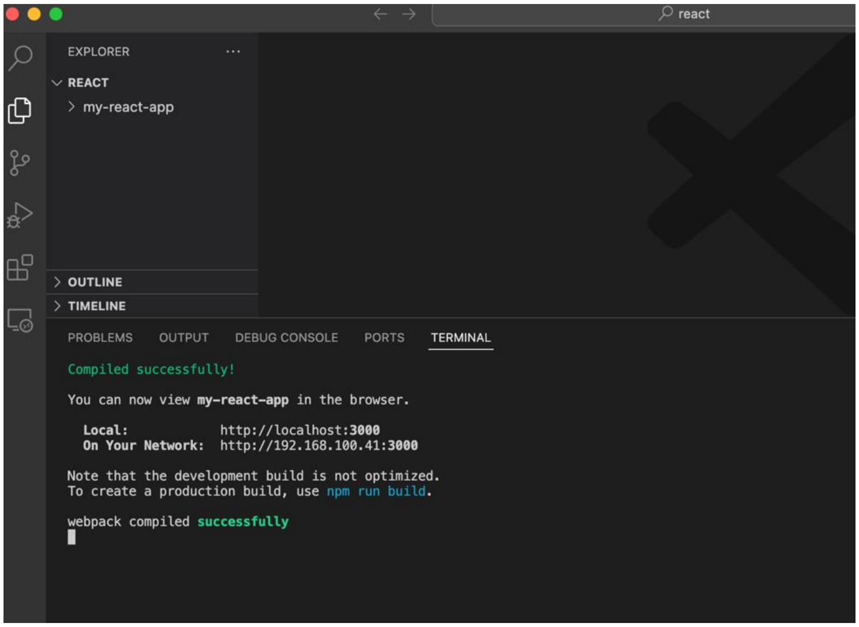
```
Inside that directory, you can run several commands:

  npm start
    Starts the development server.

  npm run build
    Bundles the app into static files for production.

  npm test
    Starts the test runner.

  npm run eject
    Removes this tool and copies build dependencies, configuration files
    and scripts into the app directory. If you do this, you can’t go back!

We suggest that you begin by typing:

  cd my-react-app
  npm start

Happy hacking!
npm notice
npm notice New major version of npm available! 8.5.0 -> 10.5.2
npm notice Changelog: https://github.com/npm/cli/releases/tag/v10.5.2
npm notice Run npm install -g npm@10.5.2 to update!
npm notice
htoinanbrang@Htoinans-MacBook-Pro react %
```

Command:

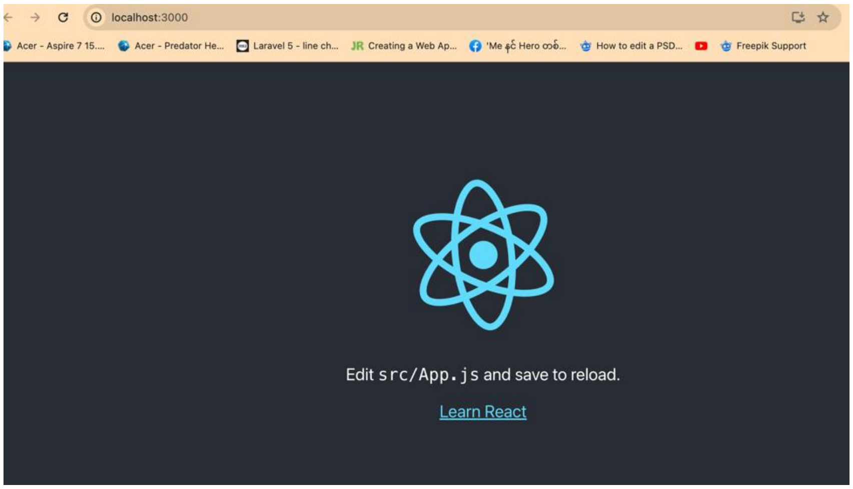
```
cd my-react-app
```

Command:

```
my-react-app> npm start
```



```
Compiled successfully!

You can now view my-react-app in the browser.

  Local:            http://localhost:3000
  On Your Network:  http://192.168.100.41:3000

Note that the development build is not optimized.
To create a production build, use npm run build.

webpack compiled successfully
```



Edit src/App.js and save to reload.

Learn React

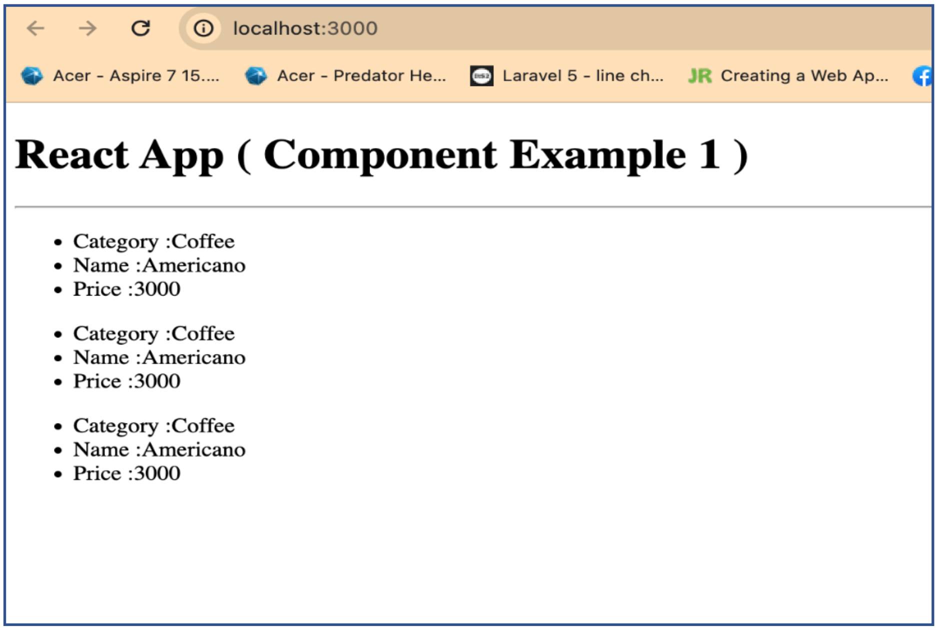
Congratulation ပါ။ Running the first React Application ကို အောင်မြင်သွားပါပြီ။ အခုကနေစပြီး React Lesson တွေကို တစ်ခုပြီးတစ်ခု ဆက်လေ့လာသွားကြပါမယ်။

Components

🎬 Video Lesson 2

Components

Example 1



React App (Component Example 1)

- Category :Coffee
- Name :Americano
- Price :3000

- Category :Coffee
- Name :Americano
- Price :3000

- Category :Coffee
- Name :Americano
- Price :3000

src/app.js

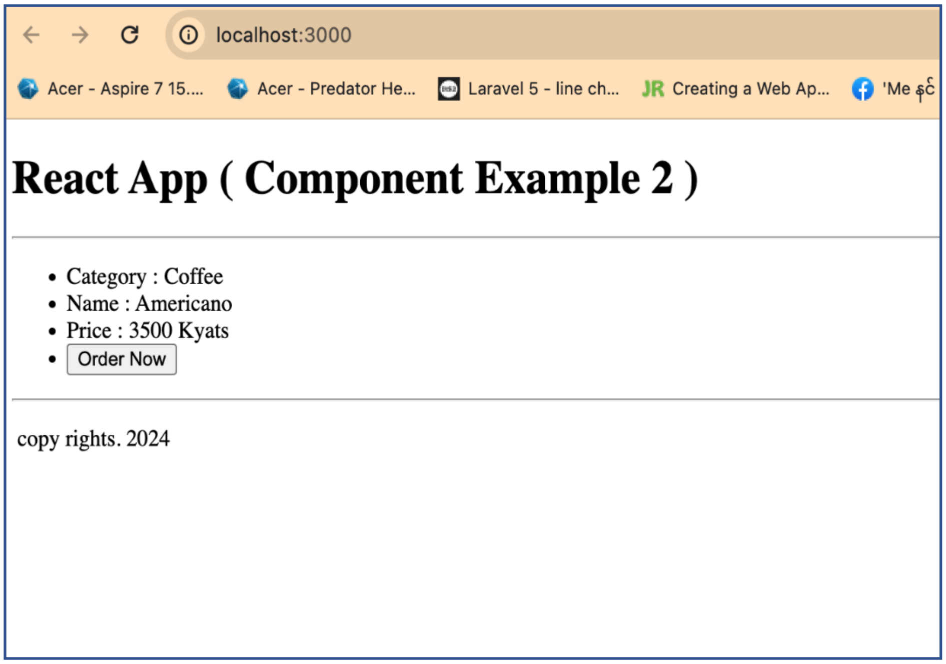
```
const Item=()=>{
 return (
  <ul>
   <li>Category :Coffee </li>
   <li>Name :Americano </li>
   <li>Price :3000 </li>
  </ul>
 );
}

const App=()=>{
 return (
  <>
  <h1>React App ( Component Example 1 ) </h1>
  <hr/>
  <Item/>
  <Item/>
```

```
    <Item/>
    </>

  );
}

export default App;
```

Example 2

```
- src
    - - Header.jsx
    - - Item.jsx
    - - Footer.jsx
    - - App.js
```

Output:



React App (Component Example 2)

- Category : Coffee
- Name : Americano
- Price : 3500 Kyats
- Order Now

copy rights. 2024

» App.js

```
import Header from './Header'
import Item from './Item'
import Footer from './Footer'

const App=()=>{
  return (
    <>
    <Header/>
    <hr/>
    <Item/>
    <hr/>
    <Footer/>

    </>

  );
}

export default App;
```

» Header.jsx

```
const header=()=>{
    return (
        <h1>React App ( Component Example 2 ) </h1>
    );
  }
export default header;
```

- Item.jsx

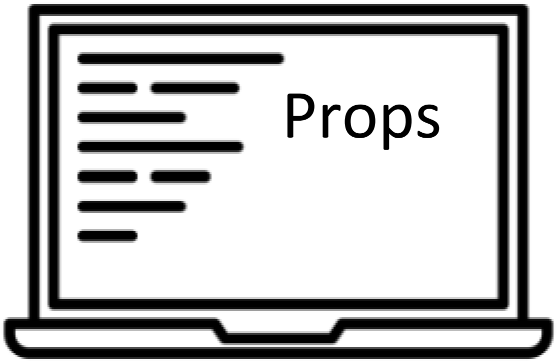
```
const Item=()=>{
  return (
    <>
   <ul>
    <li> Category : Coffee  </li>
    <li> Name : Americano </li>
    <li> Price : 3500 Kyats </li>
    <li> <button>Order Now</button> </li>
   </ul>
   </>
  );
 }
 export default Item;
```

- Footer.jsx

```
const Item=()=>{
  return (
    <>
   <ul>
    <li> Category : Coffee  </li>
    <li> Name : Americano </li>
    <li> Price : 3500 Kyats </li>
    <li> <button>Order Now</button> </li>
   </ul>
   </>
  );
 }
 export default Item;
```

Props

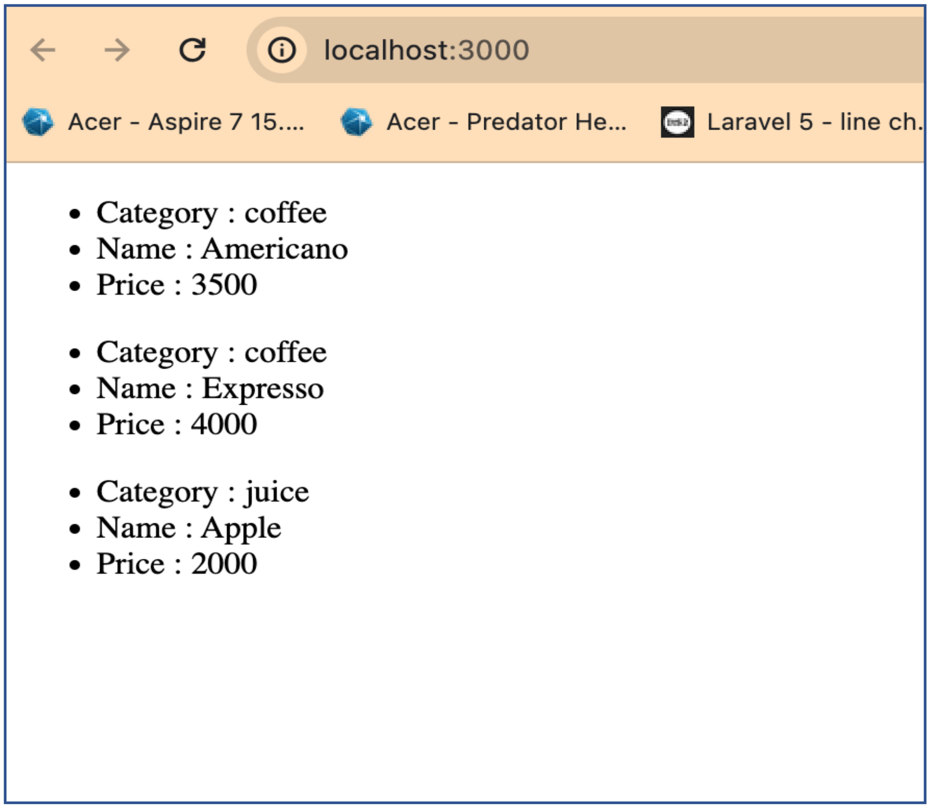
🎬 Video Lesson 3



Props

Example 1

Output:



```
• Category : coffee
• Name : Americano
• Price : 3500

• Category : coffee
• Name : Expresso
• Price : 4000

• Category : juice
• Name : Apple
• Price : 2000
```

App.js

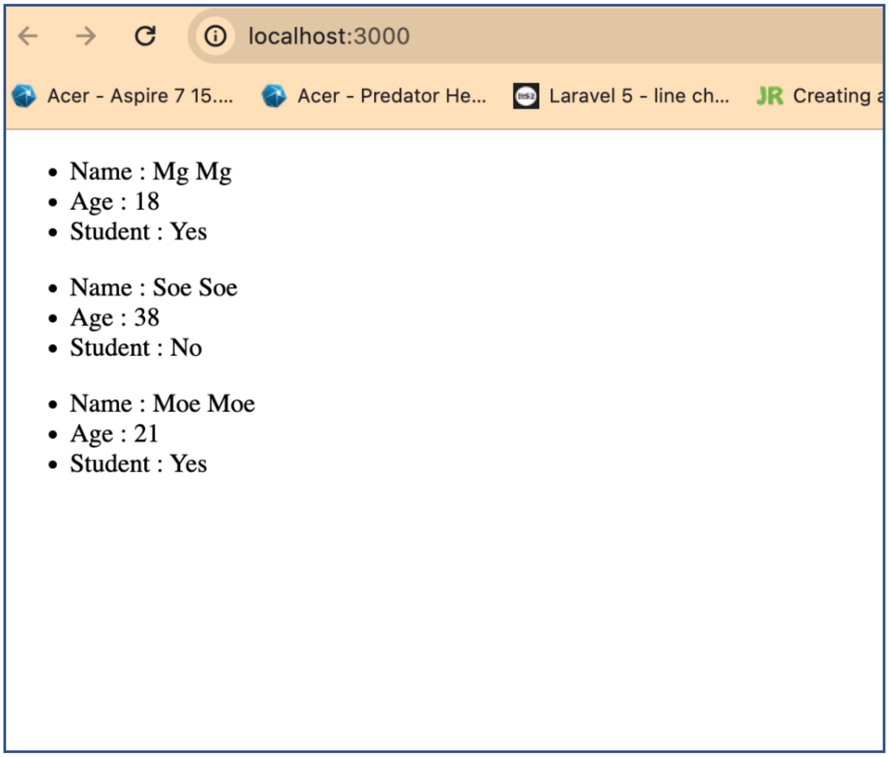
```
const Item=(props)=>{
  return(
    <>
    <ul>
      <li> Category : {props.category} </li>
      <li> Name : {props.name} </li>
      <li> Price : {props.price} </li>
    </ul>
    </>
  );
}

const App=()=>{
  return (
    <>
    <Item category='coffee' name='Americano' price={3500} />
    <Item category='coffee' name='Expresso' price={4000} />
    <Item category='juice' name='Apple' price={2000} />
    </>

  );
}

export default App;
```

Example 2

Project files

```
- src
   - - App.js
   - - Student.jsx
```

Output:



- Name : Mg Mg
- Age : 18
- Student : Yes

- Name : Soe Soe
- Age : 38
- Student : No

- Name : Moe Moe
- Age : 21
- Student : Yes

Codes:

App.js.

```
import Student from './Student'

const App=()=>{
 return (
  <>
  <Student name={'Mg Mg'} age={18} isStudent={true} />
  <Student name={'Soe Soe'} age={38} isStudent={false} />
  <Student name={'Moe Moe'} age={21} isStudent={true} />
  </>

 );
}

export default App
```

Student.jsx

```
const Student=(props)=>{
  return(
   <>
   <ul>
    <li> Name : {props.name} </li>
    <li> Age : {props.age} </li>
    <li> Student : {props.isStudent ? "Yes" : "No"} </li>
   </ul>
   </>
  );
 }

 export default Student
```

Click Event

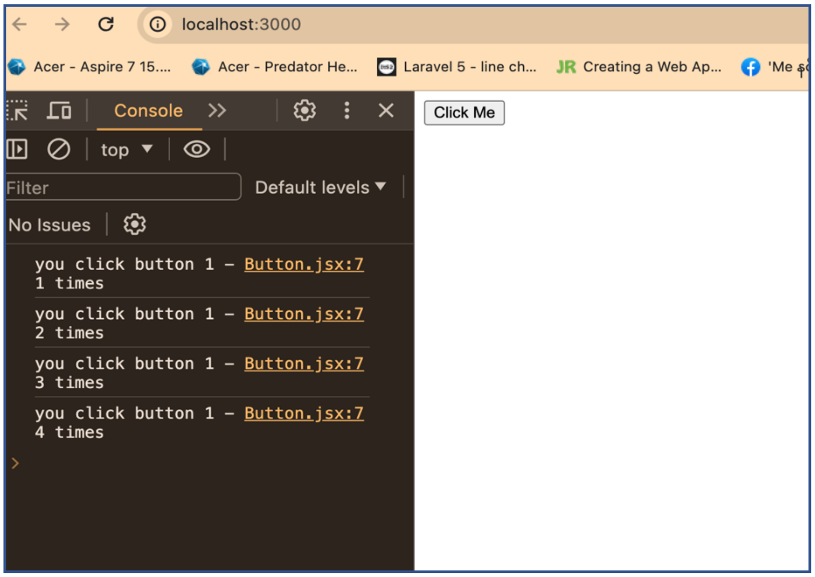
🎬 Video Lesson 4

Event

⇨ Example 1

Project Files
- src
  - - App.js
  - - Button.jsx

⇨ Output



```
you click button 1 – Button.jsx:7
1 times
you click button 1 – Button.jsx:7
2 times
you click button 1 – Button.jsx:7
3 times
you click button 1 – Button.jsx:7
4 times
```

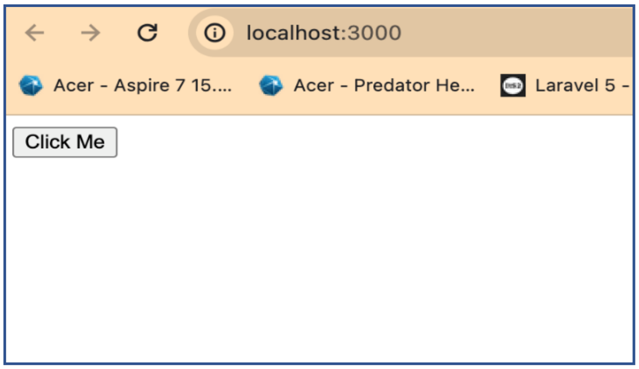
⇨ App.js

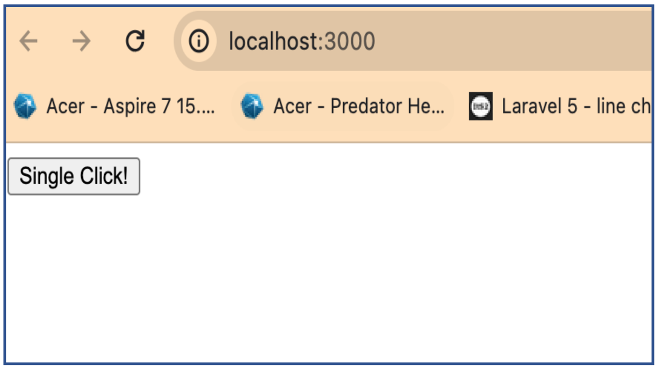
```
import Button from './Button'

const App=()=>{

  return (
    <>
    <Button name={'Click Me'}/>

    </>
  );
}

export default App
```

⇨ Button.jsx

```
function Button(props){

    let count=0;
    const handleClick= ()=> {
            count++;
            console.log(`you click button 1 - ${count} times `)

    }

    return (<button onClick={handleClick}> {props.name} </button>)

}
export default Button
```

Single click





Code:

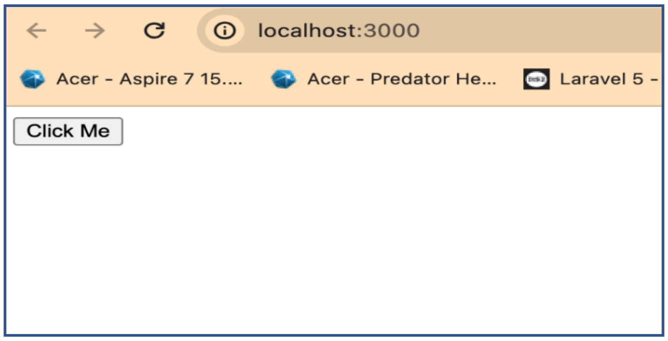
Button.jsx

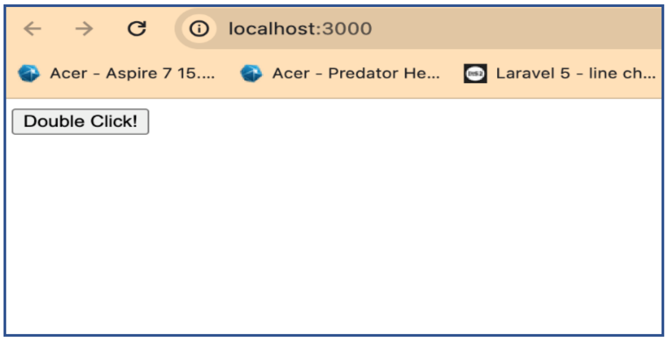
```
function Button(props){

   let count=0;
   const handleClick= (e)=> {
      count++;
      count%2===0 ? e.target.textContent="Single Click!" : e.target.textContent=`${props.name}`

   }

   return (<button onClick={(e)=>handleClick(e)}>{props.name} </button>)
```

App.js

```
import Button from './Button'
const App=()=>{

  return (
   <>
   <Button name={'Click Me'}/>
   </>
  );
}
export default App
```

Double click





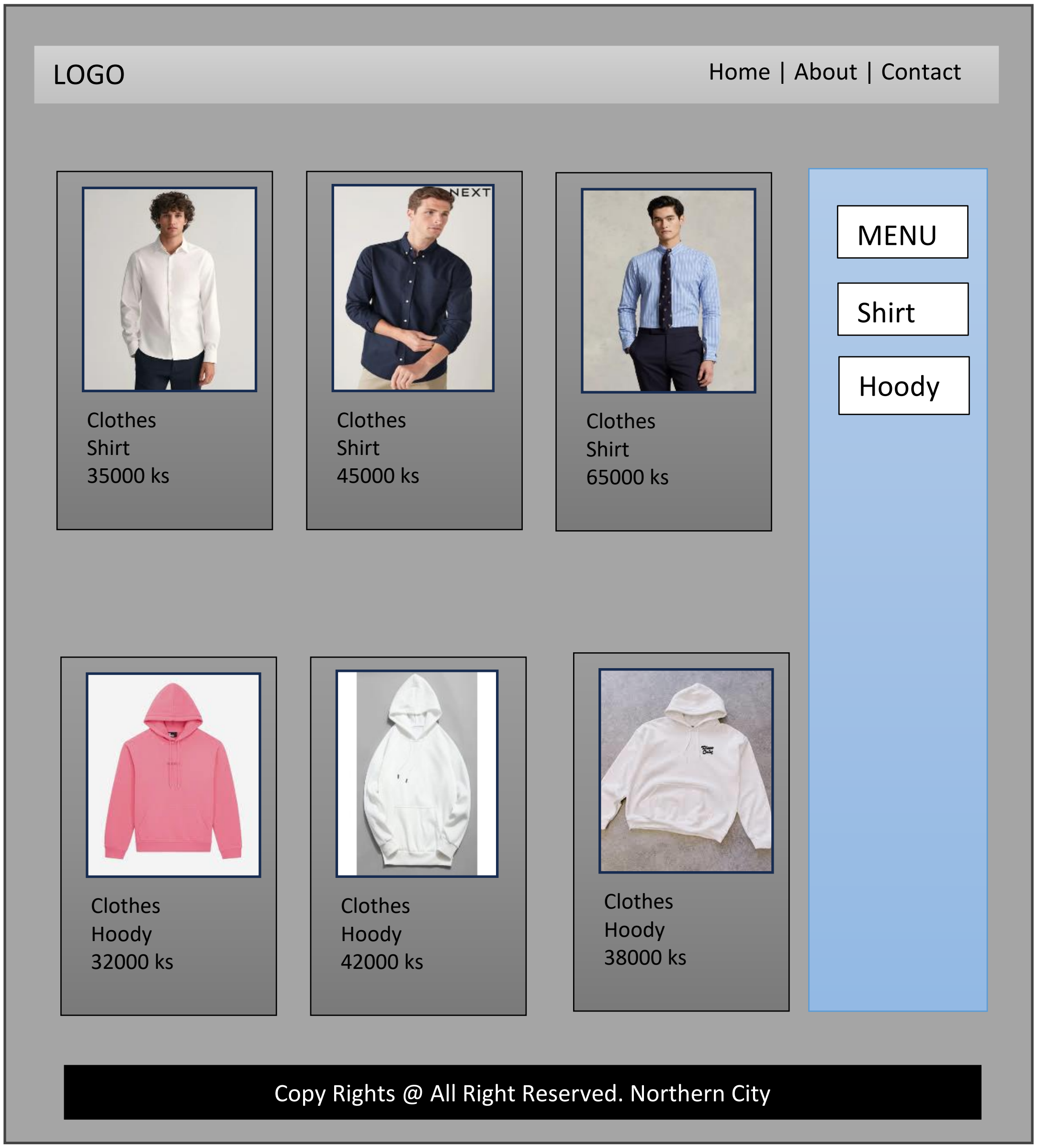
Code :

Button.jsx

```
function Button(props){

   let count=0;
   const handleClick= (e)=> {
      count++;
      count%2===0 ? e.target.textContent="Double Click!" :
e.target.textContent=`${props.name}`

   }

   return (<button onDoubleClick={(e)=>handleClick(e)}>{props.name} </button>)

}
export default Button
```

Assignment 1

Components => Navbar, Card, Menu,Footer
Props => photo,category,item name,price


LOGO
Home | About | Contact
Clothes
Shirt
35000 ks
Clothes
Shirt
45000 ks
Clothes
Shirt
65000 ks
MENU
Shirt
Hoody
Clothes
Hoody
32000 ks
Clothes
Hoody
42000 ks
Clothes
Hoody
38000 ks
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