

REACT

WEEK - 7

Handson - 9

In this hands-on lab, you will learn how to:

- Use map() method of ES6
- Apply arrow functions of ES6
- Implement Destructuring features of ES6

```
import React from "react"
```

```
const ListofPlayers = =>
```

```
  const players =
```

```
    name: "Virat"  score: 95
```

```
    name: "Rohit"  score: 88
```

```
    name: "Rahul"  score: 45
```

```
    name: "Pant"   score: 77
```

```
    name: "Bumrah" score: 65
```

```
    name: "Shami"  score: 90
```

```
    name: "Ashwin" score: 58
```

```
    name: "Dhawan" score: 73
```

```
    name: "Siraj"  score: 69
```

```
    name: "Hardik" score: 82
```

```
    name: "Kuldeep" score: 66
```

```
const lowScorers = players filter player => player score < 70
```

```
return
```

```
<div>
```

```
  <h2>                </h2>
```

```
  <ul>
```

```
    {players map player index =>
```

```
      <li key={index}>{player name}    {player score}</li>
```

```
    }
```

```
</ul>
```

```
  <h2>                </h2>
```

```
  <ul>
```

```
    {lowScorers map player index =>
```

```
      <li key={index}>{player name}    {player score}</li>
```

```
    }
```

```
</ul>
```

```
</div>
```

```
export default ListofPlayers
```

```
import React from "react"
```

```
const IndianPlayers =    =>
```

```

const allPlayers = "Virat" "Rohit" "Rahul" "Pant" "Bumrah" "Shami"

const oddPlayers = allPlayers filter _ index => index % 2 !== 0

const evenPlayers = allPlayers filter _ index => index % 2 === 0

const t20player1 t20player2 = "Surya" "Hardik"

const ranjiPlayer1 ranjiPlayer2 = "Pujara" "Rahane"

const mergedPlayers = ... t20player1 t20player2 ... ranjiPlayer1 ranjiPlayer2

return

<div>

  <h2>                </h2>

  <ul>

    {oddPlayers map p i => <li key={i}>{p}</li> }

  </ul>

  <h2>                </h2>

  <ul>

    {evenPlayers map p i => <li key={i}>{p}</li> }

  </ul>

  <h2>                </h2>

  <ul>

    {mergedPlayers map p i => <li key={i}>{p}</li> }

  </ul>

</div>

```

```
export default IndianPlayers

import logo from './logo.svg'
import './App.css'
import React from "react"
import ListofPlayers from "../components/ListofPlayers"
import IndianPlayers from "../components/IndianPlayers"

function App

  const flag = true // Toggle between true or false

  return

    <div className="App">

      <h1>                </h1>

      {flag ? <ListofPlayers /> : <IndianPlayers />}

    </div>

export default App
```

Flag = true:

Virat - 95

Rohit - 88

Rahul - 45

Pant - 77

Bumrah - 65

Shami - 90

Ashwin - 58

Dhawan - 73

Siraj - 69

Hardik - 82

Kuldeep - 66

Rahul - 45

Bumrah - 65

Ashwin - 58

Siraj - 69

Kuldeep - 66

When flag = false:

Welcome to Cricket App

Odd Team Players

- Rohit
- Pant
- Shami

Even Team Players

- Virat
- Rahul
- Bumrah

Merged T20 + Ranji Trophy Players

- Surya
- Hardik
- Pujara
- Rahane

Handson - 10

Create a React Application named “officespacerentalapp” which uses React JSX to create elements, attributes and renders DOM to display the page.

Create an element to display the heading of the page.

Attribute to display the image of the office space

Create an object of office to display the details like Name, Rent and Address.

Create a list of Object and loop through the office space item to display more data.

To apply Css, Display the color of the Rent in Red if it's below 60000 and in Green if it's above 60000.

```
import logo from './logo.svg'
```

```
import React from 'react'
```

```
import './App.css'
```

```
function App
```

```
const mainOffice =
```

```
  name: "Cozy Coworking Hub"
```

```
  rent: 55000
```

```
  address: "123 Business Bay, Chennai"
```

```
const officeList =
```

```
  name: "Urban Workloft"  rent: 45000  address: "MG Road, Bengaluru"
```

```
  name: "Sky Tower Office"  rent: 78000  address: "Connaught Place, Delhi"
```

```
  name: "GreenSpace Rentals"  rent: 62000  address: "T. Nagar, Chennai"
```

```
  name: "BudgetBase Offices"  rent: 38000  address: "Camp Road, Pune"
```

```
return
```

```
<div className="App">
```

```
  <h1>                            </h1>
```

```
  
```

```
  <h2>                            </h2>
```

```
  <p><strong>                        </strong> {mainOffice name}</p>
```

```
  <p><strong>                        </strong>
```

```
    <span style={  color: mainOffice rent > 60000 ? 'green' : 'red'  }>
```

```
      {mainOffice rent}
```

```

    </span>

</p>

<p><strong>          </strong> {mainOffice address}</p>

<h2>                </h2>

<ul>

  {officeList map office index =>

    <li key={index} style={  marginBottom: "15px"  }>

      <p><strong>      </strong> {office name}</p>

      <p><strong>      </strong>

        <span style={  color: office rent > 60000 ? 'green' : 'red'  }>

          {office rent}

        </span>

      </p>

      <p><strong>          </strong> {office address}</p>

    </li>

  }

</ul>

</div>

```

```
export default App
```



```
height 40vmin
```

```
pointer-events none
```

```
@media
```

```
.App-logo
```

```
animation infinite 20s linear
```

```
.App-header
```

```
background-color #282c34
```

```
min-height 100vh
```

```
display flex
```

```
flex-direction column
```

```
align-items center
```

```
justify-content center
```

```
font-size calc(10px + 2vmin)
```

```
color white
```

```
.App-link
```

```
color #61dafb
```

```
@keyframes App-logo-spin
```

```
transform rotate(0deg)
```

```
transform rotate 360deg
```

.App

```
padding 20px
```

```
font-family 'Segoe UI' sans-serif
```

h1

```
color #333
```


img

```
border-radius 10px
```

```
margin-bottom 20px
```

OUTPUT:

Office Space Rental App

 Office Space

Main Office Details

Name: Cozy Coworking Hub

Rent: ₹55000

Address: 123 Business Bay, Chennai

Other Available Offices

- **Name:** Urban Workloft

Rent: ₹45000

Address: MG Road, Bengaluru

- **Name:** Sky Tower Office

Rent: ₹78000

Address: Connaught Place, Delhi

- **Name:** GreenSpace Rentals

Rent: ₹62000

Address: T. Nagar, Chennai

- **Name:** BudgetBase Offices

Rent: ₹38000

Address: Camp Road, Pune

In this hands-on lab, you will learn how to:

- Implement Event handling concept in React applications
- Use this keyword
- Use synthetic event

```
import logo from './logo.svg'

import './App.css'

import React, { useState } from 'react'

import CurrencyConverter from './CurrencyConverter'

function App() {

  const [count, setCount] = useState(0)

  const handleIncrement = () => {

    increment()

    sayHello()

  }

  const increment = () => {

    setCount(prev => prev + 1)

  }

  const sayHello = () => {

    console.log("Hello! This is your static message")

  }

  const decrement = () => {

    setCount(prev => prev - 1)

  }

}
```

```
const sayMessage = message =>
```

```
  alert `You said: ${message}`
```

```
const handleSynthetic = event =>
```

```
  console log "I was clicked!"
```

```
return
```

```
<div className="App" style={ padding: "20px"  fontFamily: "Arial"  }>
```

```
  <h1>                                </h1>
```

```
  <h2>      {count}</h2>
```

```
  <button onClick={handleIncrement}>          </button>
```

```
  <button onClick={decrement} style={ marginLeft: "10px"  }>          </button>
```

```
  <br /><br />
```

```
  <button onClick={    => sayMessage "Welcome "  }>          </button>
```

```
  <br /><br />
```

```
  <button onClick={handleSynthetic}>          </button>
```

```
  <br /><br />
```

```
<CurrencyConverter />
```

```
</div>
```

```
export default App
```

```
import React, { useState } from 'react'
```

```
const CurrencyConverter = () =>
```

```
  const [rupees, setRupees] = useState('')
```

```
  const [euro, setEuro] = useState(null)
```

```
  const conversionRate = 0.011
```

```
  const handleSubmit = (e) =>
```

```
    e.preventDefault()
```

```
    const inr = parseFloat(rupees)
```

```
    if (!isNaN(inr))
```

```
      setEuro(inr * conversionRate.toFixed(2))
```

```
    else
```

```
      setEuro(null)
```

```
      alert("Please enter a valid number!")
```

```
  return
```

```

<div style={  marginTop: "40px"  }>

  <h2>                                ➡                                </h2>

  <form onSubmit={handleSubmit}>

    <input

      type="number"

      placeholder="Enter INR"

      value={rupees}

      onChange={ e => setRupees e target value }

    />

    <button type="submit" style={  marginLeft: "10px"  }>                                </button>

  </form>

  {euro !== null &&

    <p>                                <strong> {euro}</strong></p>

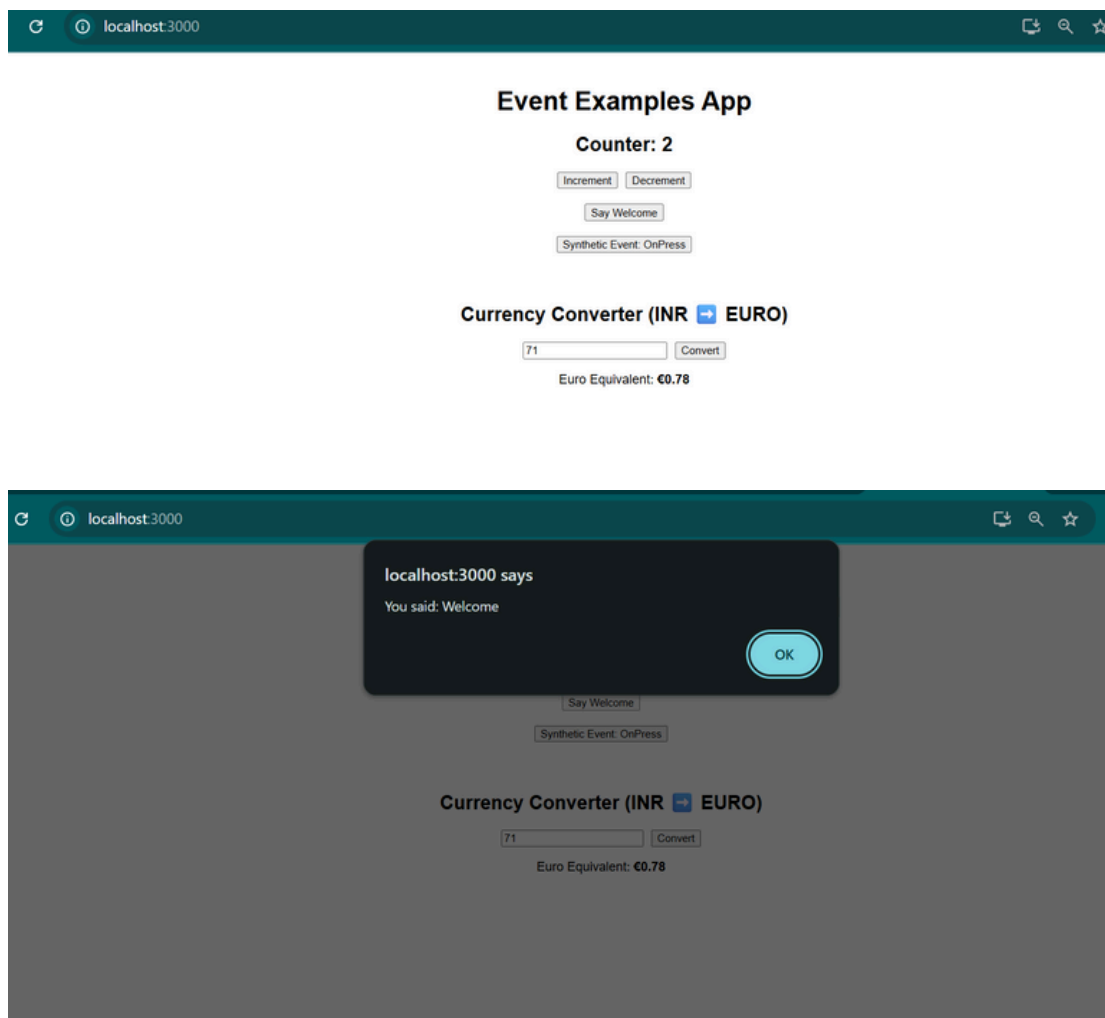
    }

  </div>

```

```
export default CurrencyConverter
```

OUTPUT



Handson - 12

Create a React Application named “ticketbookingapp” where the guest user can browse the page where the flight details are displayed whereas the logged in user only can book tickets.

The Login and Logout buttons should accordingly display different pages. Once the user is logged in the User page should be displayed. When the user clicks on Logout, the Guest page should be displayed.

```
import React from 'react'
```



```
const GuestPage = () => {

  const flights = [
    {
      id: 1, from: "Chennai", to: "Delhi", price: 5000
    },
    {
      id: 2, from: "Mumbai", to: "Bangalore", price: 3500
    },
    {
      id: 3, from: "Kolkata", to: "Hyderabad", price: 4000
    }
  ]

  return (
    <div>
      <h2>Flight Details</h2>
      <ul>
        {flights.map(flight => (
          <li key={flight.id}>
            {flight.from} ➡ {flight.to} {flight.price}
          </li>
        ))}
      </ul>
      <p><em>Total flights: {flights.length}</em></p>
    </div>
  )
}

export default GuestPage
```

```
import React from 'react'

const GuestPage = () => {
  const flights = [
    {id: 1, from: "Chennai", to: "Delhi", price: 5000},
    {id: 2, from: "Mumbai", to: "Bangalore", price: 3500},
    {id: 3, from: "Kolkata", to: "Hyderabad", price: 4000}
  ]

  return (
    <div>
      <h2>Flight Details</h2>
      <ul>
        {flights.map(flight => (
          <li key={flight.id}>
            {flight.from} ➡ {flight.to} {flight.price}
          </li>
        ))}
      </ul>
      <p><em>Total flights: {flights.length}</em></p>
    </div>
  )
}

export default GuestPage

import logo from './logo.svg'
```

```
import './App.css'

// src/App.js

import React, { useState } from 'react'

import GuestPage from './Components/GuestPage'

import UserPage from './Components/UserPage'

function App() {

  const [isLoggedIn, setIsLoggedIn] = useState(false)

  const handleLogin = () => setIsLoggedIn(true)

  const handleLogout = () => setIsLoggedIn(false)

  return (

    <div className="App" style={{ padding: "20px", fontFamily: "Arial" }}>

      <h1>                </h1>

      {isLoggedIn ?

        <>

          <button onClick={handleLogout}>          </button>

          <UserPage />

        </>

        :

        <>

          <button onClick={handleLogin}>          </button>

          <GuestPage />

        </>

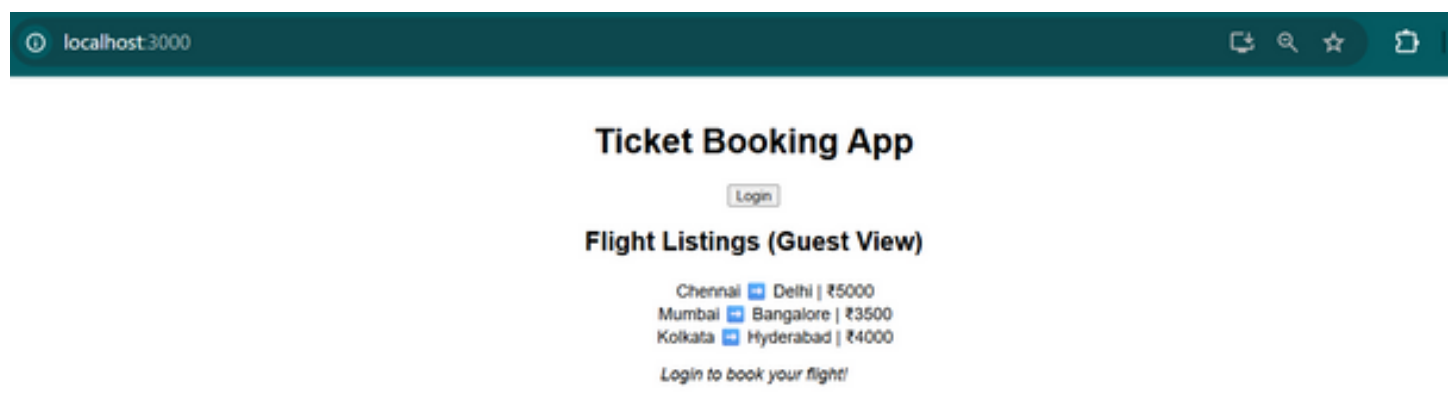
      }

    </div>

  )
}
```

```
</div>
```

```
export default App
```



Handson - 13

Create a React App named “bloggerapp” in with 3 components.

1. Book Details
2. Blog Details
3. Course Details

Implement this with as many ways possible of Conditional Rendering.

```
import React from 'react'
```

```
const BookDetails = () =>

  <div>

    <h2>          </h2>

    <p>              </p>

    <p>              </p>

    <p>              </p>

  </div>
```

```
export default BookDetails
```

```
import React from 'react'
```

```
const BlogDetails = () =>

  <div>

    <h2>          </h2>

    <p>              </p>

    <p>              </p>

    <p>              </p>

  </div>
```

```
export default BlogDetails
```

```
import React from 'react'
```

```
const CourseDetails = =>
```

```
  <div>
```

```
    <h2>                </h2>
```

```
    <p>                  </p>
```

```
    <p>                </p>
```

```
    <p>                </p>
```

```
  </div>
```

```
export default CourseDetails
```

```
import logo from './logo.svg'
```

```
import './App.css'
```

```
import React, { useState } from 'react'
```

```
import BookDetails from './Components/BookDetails'
```

```
import BlogDetails from './Components/BlogDetails'
```

```
import CourseDetails from './Components/CourseDetails'
```

```
function App
```

```
  const [selected, setSelected] = useState('book')
```

```
  // Switch Case Rendering
```

```
  const renderUsingSwitch = =>
```

```

switch selected

  case 'book'

    return <BookDetails />

  case 'blog'

    return <BlogDetails />

  case 'course'

    return <CourseDetails />

  default

    return <p>                                </p>

```

```

return

```

```

<div className="App" style={ padding: '20px'  fontFamily: 'Arial' }>

  <h1>                                </h1>

  <div>

    <button onClick={   => setSelected 'book' }>    </button>

    <button onClick={   => setSelected 'blog' }>    </button>

    <button onClick={   => setSelected 'course' }>    </button>

    <button onClick={   => setSelected 'none' }>    </button>

  </div>

  <hr />

```

```

{/* 1. If-Else Conditional */}

```

```

{   =>

  if selected === 'book'

```

```

return <BookDetails />

else if selected === 'blog'

return <BlogDetails />

else if selected === 'course'

return <CourseDetails />

else

return <p>                                </p>

}

```

<hr />

{/* 2. Ternary Operator */}

```

{selected === 'book' ?

<BookDetails />

: selected === 'blog' ?

<BlogDetails />

: selected === 'course' ?

<CourseDetails />

:

<p>                                </p>

}

```

<hr />

{/* 3. Logical AND (&&) */}

```

{selected === 'book' && <BookDetails />}

{selected === 'blog' && <BlogDetails />}

```



```
{selected === 'course' && <CourseDetails />}
```

```
{selected === 'none' && <p>                                </p>}
```

```
<hr />
```

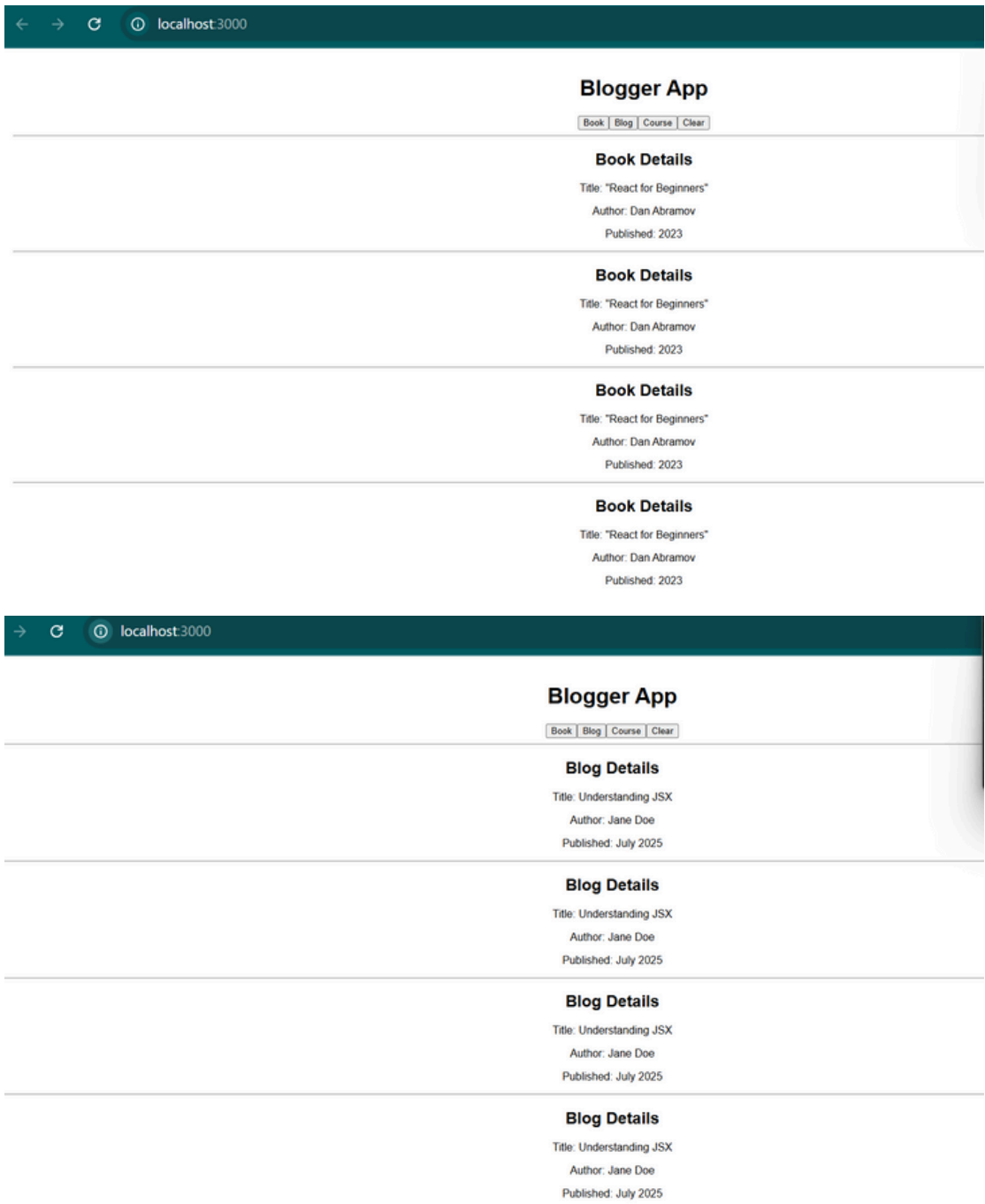
```
{/* 4. Switch Statement */}
```

```
{renderUsingSwitch }
```

```
</div>
```

```
export default App
```

OUTPUT:





localhost:3000

Blogger App

[Book](#) [Blog](#) [Course](#) [Clear](#)

Course Details

Course: Full Stack Web Development

Platform: Udemy

Duration: 40 Hours

Course Details

Course: Full Stack Web Development

Platform: Udemy

Duration: 40 Hours

Course Details

Course: Full Stack Web Development

Platform: Udemy

Duration: 40 Hours

Course Details

Course: Full Stack Web Development

Platform: Udemy

Duration: 40 Hours



localhost:3000

Blogger App

[Book](#) [Blog](#) [Course](#) [Clear](#)

Click one of the buttons to display content.

No section selected via ternary.

No section selected via && logic.

Please select an option above.