

# Dynamic Component Dispatching

This demo addresses a need to dynamically call a React component by a string name.

Approaches using `Eval` or `Function` are not allowed.

Instead, we use a JavaScript object to map a string key to a component name in a factory pattern. We could call the resolved component as a function, but parameters are props in the React world. Instead, we use a factory that produces React component instantiations. Here is `RenderFactory.jsx` :

```
import React from 'react';
import RenderOne from '../components/RenderOne';
import RenderTwo from '../components/RenderTwo';
import RenderThree from '../components/RenderThree';

const dispatchCode = (renderer, param) => {
  // To add component: add its import above; then add a line for its name here:
  const code2Renderer = {
    RenderOne: <RenderOne param={param}/>,
    RenderTwo: <RenderTwo param={param}/>,
    RenderThree: <RenderThree param={param}/>,
  };

  return code2Renderer[renderer] || <Rats! Code not found/>;
};

export function RenderFactory(props) {
  const { code, param } = { ...props };
  const component = `Render${code}`;

  return dispatchCode(component, param);
}
```

A client component would invoke a child by `code` property string like this:

```
<RenderFactory code={code} param={`at ${new Date().toLocaleTimeString()}`} />
```

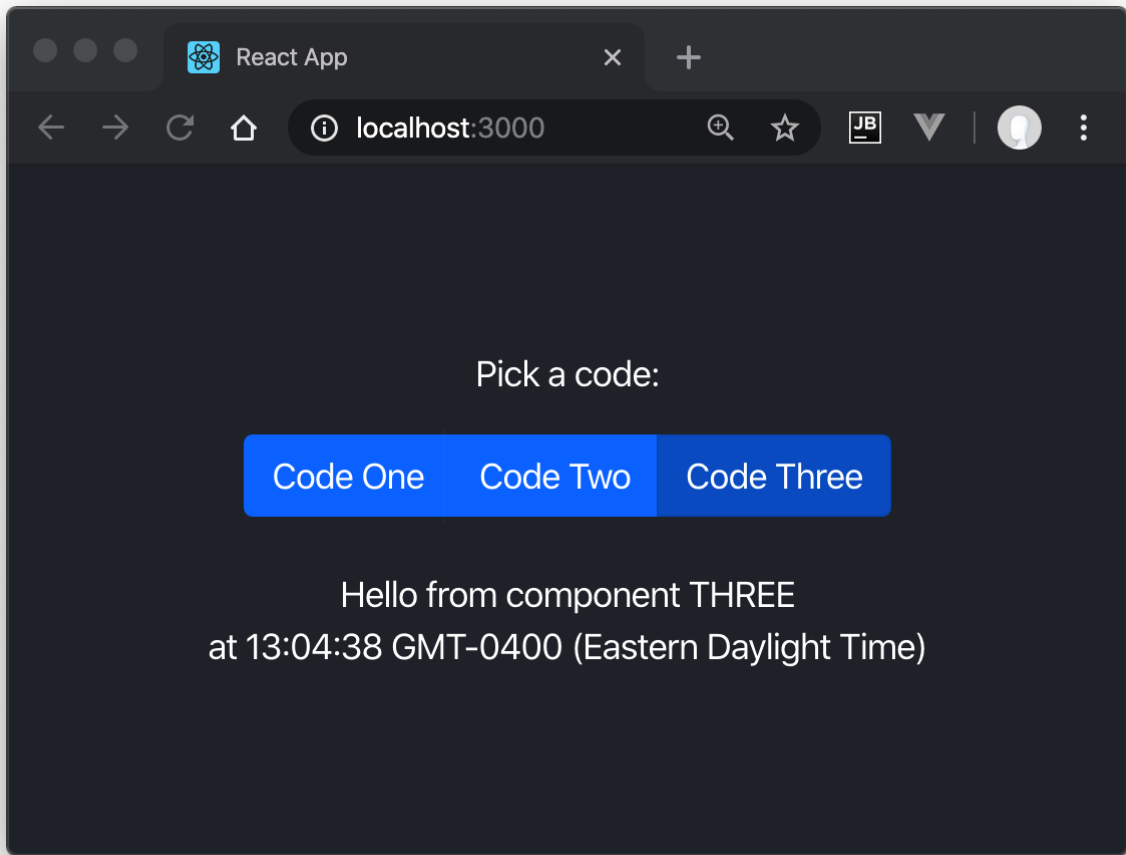
The `param` property is our single parameter, but we could have coded for more parameters.

Here is one demo dynamic component:

```
import React from "react";

export default function RenderThree(props) {
  const { param } = { ...props };
  return <div>Hello from component THREE<br/>{param}</div>;
}
```

The demo UI chooses the dispatch code property via toggle buttons;



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## Instructions

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This project was bootstrapped with [Create React App](#).

## Available Scripts

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In the project directory, you can run:

**yarn start**

Runs the app in the development mode.

Open <http://localhost:3000> to view it in the browser.

The page will reload if you make edits.

You will also see any lint errors in the console.

**yarn test**

Launches the test runner in the interactive watch mode.

See the section about [running tests](#) for more information.

## **yarn build**

Builds the app for production to the `build` folder.

It correctly bundles React in production mode and optimizes the build for the best performance.

The build is minified and the filenames include the hashes.

Your app is ready to be deployed!

See the section about [deployment](#) for more information.