

# Hands-on Lab: Hello World with React



Estimated Time: 20 minutes

In this lab, you will be creating your first React page and your first React application. As the first step to learning anything new in the coding world, you will render a 'Hello World' page.

## Learning Objectives

After completing this exercise, you should be able to perform the following tasks:

- Create a simple React page
- Create, run, and render a React application
- Set properties for a React component

## First React application

1. From the menu on top of the lab, go to Terminal and open a new terminal.
2. In the terminal, paste and run the following command to go to the `home/project` directory.

1. 1

1. `cd /home/project`

Copied! Executed!

3. Run the following command to create a React application named **myfirstapp**. It is mandated that the React application name cannot contain any uppercase letter.

1. 1

1. `npx create-react-app myfirstapp`

Copied! Executed!

4. It requires you to confirm that the packages required can be installed. Confirm by pressing `y` on your keyboard to get started with the installation.

```
theia@theia-lavanyas:/home/project$ npx create-react-app myfirstapp
Need to install the following packages:
  create-react-app@5.0.1
Ok to proceed? (y) █
```

5. After the installation is over, the application is created inside a folder with the name specified by you for the application. Change to that folder by running the following command.

1. 1

1. `cd myfirstapp`

Copied! Executed!

6. `create-react-app` creates the boiler plate code which is required for you to run a basic React app. To check the React app that has been created, run the following command.

1. 1

1. `npm start`

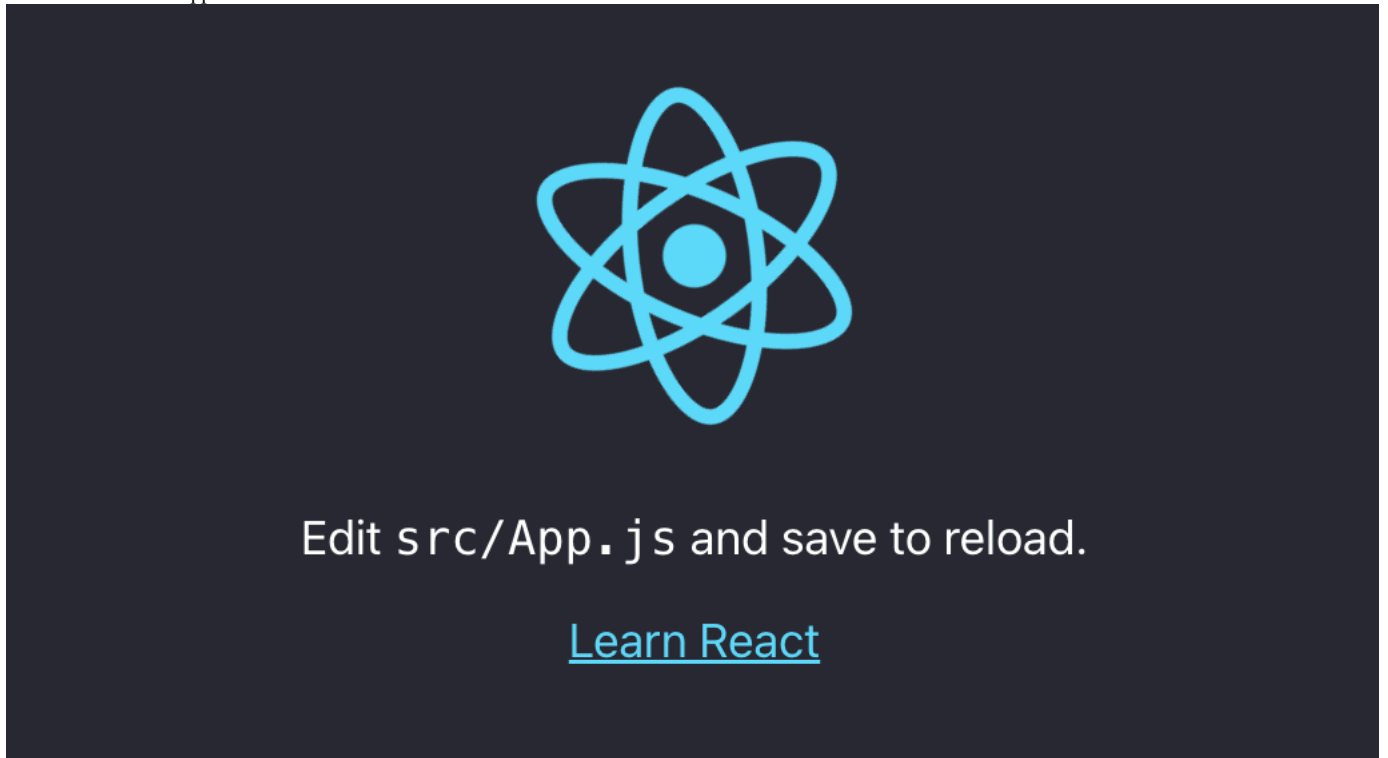
Copied! Executed!

This will start the React development server on port 3000.

7. Click **Launch Application** below or the SkillsNetwork Toolbox logo and from the options select **OTHER** and click **Launch Application**. Enter the port number **3000** and click the arrow mark to launch the application.

Launch Application

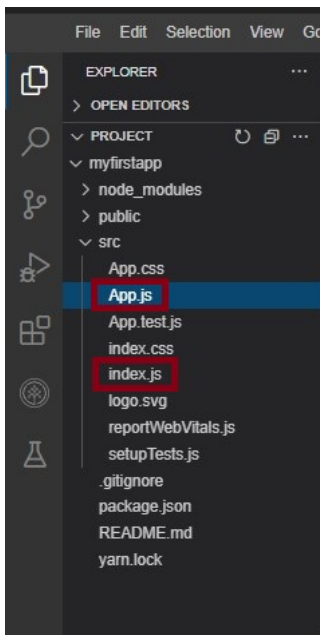
8. This will launch the application in a new browser tab.



Press Ctrl+C at the command prompt to stop the React development server.

## Modify the Hello World App

1. Within the src folder of the myfirstapp project folder, you will find **App.js** and **index.js**.



2. Replace the following code in index.js inside the src folder. All the styling will be removed as a result, leaving you with the basic needs.

```
1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. 8

1. import React from 'react';
2. import ReactDOM from 'react-dom/client';
3. import App from './App';
4.
5. const root = ReactDOM.createRoot(document.getElementById('root'));
6. root.render(
7.   <App />
8. );
```

Copied!

3. Replace the content of App.js inside the folder src, with the following code:

```
1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7

1. function App() {
2.   return (
3.     <h1>Hello World</h1>
4.   );
5. }
6.
7. export default App;
```

Copied!

4. Remove all the files which you do not require for this lab, by running the following command:

```
1. 1

1. rm src/App.css src/App.test.js src/index.css src/logo.svg src/reportWebVitals.js src/setupTests.js
```

Copied!

Executed!

5. Now start the server again and follow the steps mentioned earlier to launch and view the application on the browser.

```
1. 1

1. npm start
```

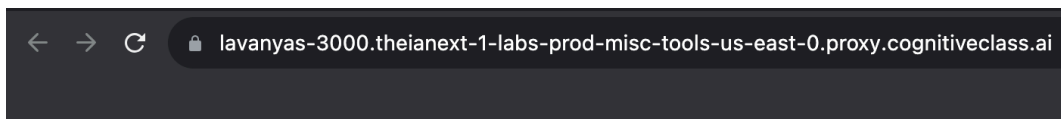
Copied!

Executed!

6. Click Launch Application below.

Launch Application

You will see the page render with the message "Hello World".



# Hello World

## Hello World with Time


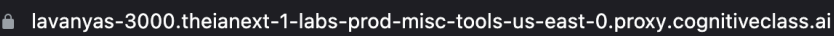
1. Change the code in App.js, by pasting the code shown below. It will render the timestamp along with the Hello World message in the browser page.

```
1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. 8
9. 9
10. 10
11. 11
12. 12

1. function App(props) {
2.   const currDate = new Date();
3.
4.   return (
5.     <div>
6.       <h1>Hello, world!</h1>
7.       <h2>The time now is {currDate.toLocaleTimeString()}</h2>
8.     </div>
9.   );
10. }
11.
12. export default App;
```

Copied!

2. Now you will see the time along with "Hello World". Refresh the page if you don't see the update.

# Hello, world!

## The time now is 12:52:13.

3. To ensure the time is kept current and is constantly changing, change the code in index.js by pasting the following code in it:

```
1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. 8
9. 9
10. 10

1. import React from 'react';
2. import ReactDOM from 'react-dom/client';
3. import App from './App';
4.
5. const root = ReactDOM.createRoot(document.getElementById('root'));
6. function ref() {
7.   root.render(<App/>);
8. }
9.
10. setInterval(ref, 1000);
```

Copied!

4. Now start the server again, if it is not running and follow the steps mentioned earlier to launch and view the application on the browser.

```
1. 1

1. npm start
```

Copied!

Executed!

Launch Application

Practice exercise:

1. Replace the "Hello World" message to display your name instead.
2. Replace the code to display the date along with the time.

- [Click here for a hint](#)
- [Click here for the solution](#)

## Author(s)

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