

Price: R5,200.00 excl. VAT
Duration: 2 days
Delivery: Virtual classroom

React Development

Description

React is a JavaScript library for building user interfaces. This course will teach you the fundamentals of using the React library to create web-based applications.

Objectives

After you have completed the React Development course, you will be able to:

- Understand and create custom React components.
- Understand the concept of state and lifecycle in React.
- Be able to handle events in React.
- Implement conditional rendering of React components.
- Use lists and keys in React.
- Handle forms and form controls in React.
- Use React Router to handle routing functionality.

Intended Audience

You should attend the React Development course if:

- You are a JavaScript programmer and you want to use React for web-based applications.
- You need to support web applications that use React.

Prerequisites

Before you attend the React Development course:

- You must be able to code in HTML and CSS, and create HTML forms. If you can't write HTML code, please first attend our HTML 5 and CSS course.
- You must be able to program in JavaScript. If you have little or no JavaScript programming background, please first attend our JavaScript Programming course.

Course Contents

Introduction

- Introduction to React.
- Adding React to an HTML page.
- Using Create React App.

React Basics

- Classes in JavaScript.
- Function and class components.
- The virtual DOM.
- The render() method.
- JavaScript XML (JSX).
- Embedding expressions in JSX.

Custom React Components

- User-defined components.
- Creating reusable components.
- React components as pure functions.

React State and Lifecycle

- The React lifecycle.
- The state object.
- The ticking clock example.
- The setState() method.

Events and Event Handling

- Event names.
- Default behaviour.
- Adding event handlers.
- Binding this in callbacks.
- Passing arguments.

Conditional Rendering

- Simple conditional rendering.
- Using variables.
- Logical operators.
- The conditional operator.
- Returning null.

Lists and Keys

- Creating a list.
- Creating keys.
- The scope for uniqueness.
- Passing keys as props.

Forms and Validation

- Controlled components.
- The textarea element.
- The select element.
- Handling multiple inputs
- Controlling user input.
- Uncontrolled components.

Extending React Components

- Lifting state.
- Reuse and inheritance.

Navigation and Routing

- Routers.
- Route matchers.
- Navigation (or route changers).
- Routing example.

*** The lecturer reserves the right to modify the contents of the course to suit the needs of the delegates.*