

Course Name : CREATE VIRTUAL REALITY APPS USING REACT 360
Duration : 5 days
Level : Beginner - Intermediate
Mode : Physical Classroom or Online Live Instructor

COURSE DESCRIPTION:

In this course our certified trainer will teach you the basics of Facebook's React 360 virtual reality library and how you can build 360-degree multimedia WebVR applications. Before we dive into the React 360, we start with Modern JavaScript & ReactJS first. You will be able to build VR Applications from scratch, deploy them to production and be able to view them on desktop and headsets. Additionally, as we progress through the course, the trainer will teach you more advanced features of React 360 and how you can implement them to create more interesting and intricate projects.

WHAT WILL YOU LEARN?

- Modern JavaScript
- React JS
- Introduction to Virtual Reality
- React 360 Basic Principles and Features
- Photos, Videos, Audio, Animations, Complex State Management
- React 360 Advanced Features (Dynamic Surfaces & Native Modules)
- Implement Geometric Objects Formerly from React VR (Box, Cylinder, Plane, Sphere)
- Understand How to Use an API in React 360 to Fetch and Present Data
- Deploy React 360 Applications to Production

PREREQUISITE:

Beginners. No VR knowledge is required.

METHODOLGY:

This program will be conducted with interactive lectures, PowerPoint presentation, discussions, and practical exercise along the real-world projects. This course can be conducted as instructor-led (ILT) or virtual instructor-led training (VILT).

JOB SCOPE:

After completing this course, the candidates can join for the following job roles,

- VR Application Developer
- Game Developer (3D/VR)
- 3D Developer
- Interactive Media Developer
- Mobile Game Developer
- Web Developer (VR)

MODULE 1: MODERN JAVASCRIPT

- Introduction
- Intro to Modern JavaScript
- Set up a Dev Environment
- Write and search strings
- Write maps
- Destruct Arrays
- Search Arrays
- Create objects
- Destructure objects
- Iterate with the for/of loop
- Getting and setting class values
- Using ES6 functions
- Build and return promises
- async/await syntax

MODULE 2: WHY REACT

- Introduction
- What is Composition
- What is Declarative Code
- Unidirectional Data Flow
- React Is “just JavaScript”

MODULE 3: RENDERING UI WITH REACT

- Rendering UI Intro
- Creating Elements and JSX
- Create React App
- Composing with Components

MODULE 4: STATE MANAGEMENT

- Introduction
- Pass Data Into Components With Props
- Functional Components
- Add State To A Component
- Update state with setState
- PropTypes
- Controlled Components

MODULE 5: LIFE CYCLE EVENTS

- Introduction
- componentDidMount Lifecycle Event

MODULE 6: REACT ROUTER

- React Router Intro
- Dynamically Render Pages
- The BrowserRouter Component
- The Link Component
- The Route Component
- Finishing the Contact Form
- React Router Outro

MODULE 7: VIRTUAL REALITY AND REACT 360

- Introduction to VR
- Introduction to React 360
- Installation
- Understanding React 360 Project directories
- Migrating React VR code to React 360

MODULE 8: PROJECT 1: VR HOURSE TOUR

- Introduction
- Background Image and Layout
- VrButton & State Change
- Surface Panels
- Store & Data Synchronization
- Styling
- Audio
- Landing Page
- Deploying Our VR App

MODULE 9: PROJECT 2: DYNAMIC SURFACES

- Introduction
- Introduction
- Writing and Implementing a Native Module
- Changing the Shape of a Panel
- Changing the Size Dynamically
- Creating and Destroying Dynamically

MODULE 10: PROJECT 3: VR TOURISM

- Introduction
- Introduction
- Shared Surfaces
- Creating an Introduction Scene
- Dynamically Displaying Hot Spot Information

CONCLUSION

- QA
- Useful References and Books
- Feedback