Malla Reddy College of Engineering & Technology

(Autonomous Institution-UGC, Govt of India)

Department of Information Technology

Report of the REACT JS Workshop

1. Title of the event : REACT JS

2. Program Theme : Technology Transfer

3. Date & Time : 10/03/2025 to 12/03/2025

: 17/03/2025 to 19/03/2025

4. Duration (in days) : 3 days.

5. No of Student Participants : 140

6. No of Faculty Participants : Nil

7. No of External Participants (if any) : Nil

8. Expenditure incurred (if any) : Nil

9. Mode of Delivery : Offline

10. Any other remarks : -

14. Objectives of the Activity (In 100 words):

- Students will have basic idea on Component-Based Architecture

- Students will learn working nature of **Declarative UI**

- Students will gain knowledge on **Efficient Rendering with**

- Students will gain knowledge on **Unidirectional Data Flow**

- Students will have exposure and hands-on practice session on **JSX Syntax**

- Students will have basic idea on **Ecosystem and Flexibility**

15. Benefits in terms of learning/Skill/Knowledge obtained:

I. Component-Based Architecture
React promotes a modular approach by breaking down the UI into reusable components. This makes the development process more organized and manageable, allowing developers to focus on smaller units of the app.

II. Declarative Syntax
React uses a declarative approach, meaning you describe what the UI should look like based on the current state, and React takes care of updating the DOM efficiently. This simplifies UI development and debugging.

III. Virtual DOM
React uses a Virtual DOM, which is a lightweight copy of the actual DOM. When the state changes, React first updates the Virtual DOM and then compares it with the real DOM. This helps improve performance by minimizing direct manipulations of the real DOM.

IV. Fast Rendering
The Virtual DOM allows React to update only the necessary parts of the UI, leading to faster rendering and better performance, especially in dynamic applications with frequent state changes.

V. **Reusable Components**
With React, you can create components that can be reused across different parts of the application. This leads to less redundant code and a more maintainable codebase.

VI. **JSX Syntax**
React uses JSX (JavaScript XML), which allows you to write HTML-like code in JavaScript. This makes it easier for developers to visualize the structure of the UI within their code, blending HTML and JavaScript in a more intuitive way.

VII. **React Native**
With React Native, you can build mobile applications for iOS and Android using the same principles and codebase as React, making it easier for developers to create cross-platform applications.

VIII. **SEO Friendly**
React can be made SEO-friendly through server-side rendering (SSR), which allows search engines to crawl content. Libraries like Next.js help with this, making it easier to optimize React apps for search engines.

IX. **Rich Developer Tools**
React comes with powerful developer tools like React Developer Tools, which help inspect component hierarchies, view state and props, and debug your application efficiently.

X. **Easy to Learn**
React is relatively easy to learn, especially for developers already familiar with JavaScript. The concepts are straightforward, and there's a lot of documentation and community support to help you along the way.

Signature of Co-Ordinator   **Signature of HOD**   **Signature of IIC President**

SCHEDULE							
S.NO	**DATE**	**TIME**	**VENUE**	**MODULE**	**YEAR**	**SECTION**	**FACULTY NAME**
1	06-03-2025	FN	Auditorium	1,2,3	III	A, B, C&CSIT	Mr. M.VAZRALU
							Mr. K.NAGA KOUSHIL REDDY
		AN	Auditorium	4,5,6	III	A, B, C&CSIT	Mrs. M.AISHWARYA
							Mrs. K.SWETHA
2	07-03-2025	FN	Auditorium	7,8,9	III	A, B, C&CSIT	Mr.T.SRINIDHI
							Mr. B.SUNIL
		AN	Auditorium	10,11,12	III	A, B, C&CSIT	Ms. V V NAGAMANI
							Mrs. M.AISHWARYA
3	08-03-2025	FN	LAB-1	13,14,15	III	A	Mrs. K SWETHA
							Mr. K.NAGA KOUSHIL REDDY
		AN	LAB-1	16,17	III	A	Mr. M.VAZRALU
							Mr.T.SRINIDHI
		FN	LAB-4	13,14,15	III	CSIT	Dr. A.LAKSHMAN
							Ms. V V NAGAMANI
		AN	LAB-4	16,17	III	CSIT	Dr. A.LAKSHMAN
							Mr. K.NAGA KOUSHIL REDDY
		FN	LAB-5	13,14,15	III	B & C	Mr. B.SUNIL
							Mr. R.CHANDRA SHEKAR
		AN	LAB-5	16,17	III	B & C	Mr. B.SUNIL
							Ms. V V NAGAMANI

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

CODETANTRA

THREE DAYS WORKSHOP ON

React JS

10th-12th MARCH,2025

ORGANIZED BY

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERINNG

VENUE : E – CLASSROOM, LAB 1202 - II YEAR CSE(A,B,E,G)

Dr. VSK Reddy
Director

Dr. S. Srinivasa Rao
Principal

Dr. T. Venugopal
Dean-Student Welfare

Dr. S. Shanthi
HOD SoCSE- 1

Dr. G. Sharada
HOD SoCSE- 2

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A GRADE