

## **Gyanmanjari Innovative University, Bhavnagar**

Report on

# Expert talk on "Building scalable full stack Apps with MERN, Next.js & Typescript"

Date: 25/07/2025 Time: 03:30 PM - 04:30 PM

Venue: TF - 32

No. of Student	40
Department	Information Technology
Semester	B.Tech 3 <sup>rd</sup> Class - Z
Faculty Co-Ordinator	Prof. Sunil H. Chavda,
	Prof. Shwetaba B. Chauhan,
	Prof. Suraj D. Gohil,
	Prof. Japan M. Mavani,
	Prof. Tarjanee M. Vyas

#### **About Expert**

**Ms. Ramona Frangrance Denny** is a dynamic and experienced full-stack developer at **ADITE Technology, Bhavnagar**. With a strong foundation in modern web technologies, she has worked extensively on real-world projects using the **MERN stack (MongoDB, Express.js, React, Node.js)**, along with Next.js for server-side rendering and TypeScript for scalable, type-safe code.

Her professional journey reflects a deep understanding of scalable architecture, performance optimization, and full-cycle web application development — from backend services to front-end user interfaces. She is known for her practical approach to software development, focusing not only on clean coding practices but also on deployment, testing, and version control using tools like Git, Docker, and CI/CD pipelines.

Ms. Denny is also an active mentor and speaker who enjoys sharing knowledge with aspiring developers. Her sessions are engaging, interactive, and filled with industry-relevant examples that help bridge the gap between theoretical learning and practical application. She emphasizes the importance of writing maintainable code, following best practices, and continuously adapting to evolving technologies in the software development ecosystem.

With her dedication to technology and education, she continues to inspire and guide students and professionals alike in their journey toward becoming competent and future-ready developers.

#### **Objective of Talk**

The primary objective of the expert talk on "Building Scalable Full Stack Apps with MERN, Next.js & TypeScript" was to provide students with a clear understanding of how modern web applications are developed and scaled in real-world environments. The session aimed to bridge the gap between academic knowledge and industry practices by introducing students to cuttingedge technologies like the MERN stack, Next.js, and TypeScript.

Through this session, students were expected to:

- Gain insights into the structure and flow of **full-stack web applications**.
- Understand how to build scalable and maintainable codebases using industry-relevant tools and frameworks.
- Learn the significance of **server-side rendering**, **API** integration, and type safety in modern development.
- Develop **awareness** about current trends in web development and what skills are expected in the job market.

The talk was designed to equip students with both conceptual knowledge and practical strategies for building end-to-end web solutions, preparing them for internships, personal projects, or future roles in the tech industry.

#### **About Expert Session**

The expert session on "Building Scalable Full Stack Apps with MERN, Next.js & TypeScript" was conducted by Ms. Ramona Frangrance Denny, a skilled full-stack developer from ADITE Technology, Bhavnagar. The primary aim of the session was to introduce students to modern web development technologies that are currently shaping the software industry. With a clear and engaging approach, Ms. Denny walked the audience through the MERN stack—comprising MongoDB, Express.js, React, and Node.js—and elaborated on how each component contributes to building dynamic, full-featured web applications.

A key highlight of the session was the detailed explanation of **Next.js**, a powerful React framework known for its support of server-side rendering, routing, and improved SEO. Ms. Denny explained how using Next.js along with React enhances performance, scalability, and user experience in real-world projects. She also introduced **TypeScript**, focusing on its advantages in large-scale projects, such as type safety, better tooling, and early detection of bugs during development. Students were shown how these technologies work together to create clean, efficient, and production-ready web applications.

The session also provided valuable insight into **project structuring**, **modular coding**, and **real-time API integration**, highlighting how backend and frontend systems communicate effectively. Ms. Denny emphasized best practices in coding, including reusable components, folder organization, and code maintainability. Additionally, she discussed essential tools and workflows used in the industry, such as **Git for version control**, **Docker for containerization**, and **CI/CD pipelines** for automated deployment. These discussions helped students understand the lifecycle of a full-stack project from development to deployment.

Overall, the session was a highly enriching experience for the attendees. It provided both a theoretical foundation and practical exposure to some of the most in-demand technologies in today's tech landscape. Students walked away with a clearer understanding of how to approach web development projects, which tools and technologies to focus on, and how to think like a software engineer building scalable systems. The session truly empowered students to take the next step in their development journey with confidence.

### **Photographs**







