



MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE

(Deemed to be University)

Affiliated to JNTUA, Ananthapuramu & Approved by AICTE, New Delhi

NAAC Accredited with A+ Grade, NIRF India Rankings 2024 - Band: 201-300 (Engg.)

NBA Accredited - B.Tech. (CIVIL, CSE, ECE, EEE, MECH, CST), MBA & MCA



A Report on Three-day Workshop on “Career++: Java TechTrek - Journey from Java to Cloud”

Organized by Department of Computer Applications

from 04-12-2025 to 06-12-2025



Report submitted by Mr. P. Seshu Kumar, Assistant Professor, Department of Computer Applications and Mr. R. Mallikarjuna, Assistant Professor, Department of Computer Applications.

Resource Person Details: Mr. K. V. Subba Reddy, Corporate Trainer and Founder of Dhruva SoftTech,

Mode of Conduct: Offline

Report Received on 11.12.2025

Introduction: The Department of Master of Computer Applications, MITS – Deemed to be University, organized A Three-Day Workshop on *Career++: Java TechTrek – Journey from Java to Cloud* from 04 to 06 December 2025 at Seminar Hall – C. This workshop was designed to equip first-year MCA students with strong foundational and practical skills in Java programming while introducing them to modern industry trends, including cloud integration. Through interactive lectures, demonstrations, and hands-on coding sessions, participants gained real-world exposure to Java technologies and an understanding of how Java skills evolve into cloud-based development pathways.

Objectives of the Workshop:

- To provide students with real-world practical knowledge of Java programming and strengthen their understanding of core and advanced concepts
- To introduce participants to the industry-relevant Java ecosystem, including object-oriented programming, collections, exception handling, and application development.
- To help students understand the career path from Java programming to cloud technologies, highlighting modern development practices and tools.
- To enhance hands-on learning through coding exercises, demonstrations, and problem-solving activities aligned with current software industry requirements.
- To build confidence among students to develop Java applications and prepare them for future learning in cloud platforms and enterprise technologies.



Participants:

The workshop was attended by First Year MCA students of MITS – Deemed to be University. All participants actively engaged in the hands-on sessions, coding activities, and discussions throughout the three days, contributing to the overall success of the workshop.

Inaugural Session (04-12-2025):

The workshop commenced with a Welcome Note delivered by Mr. P. Seshu Kumar. He warmly welcomed the resource person, Mr. KV Subba Reddy, Corporate Trainer and Founder of DhruvaSoftTech, along with the faculty members and First Year MCA students of MITS – Deemed to be University. In his address, he emphasized the significance of Java as a core programming language and highlighted how the workshop titled *Career++: Java TechTrek – Journey from Java to Cloud* would provide students with valuable hands-on exposure. Mr. Seshu Kumar encouraged participants to actively engage with the sessions conducted by Mr. KV Subba Reddy and make the most of the practical learning opportunities provided. His motivational welcome set an inspiring and enthusiastic tone for the three-day workshop.

Technical Sessions:



Day 1 – 04-12-2025

The first day focused on strengthening the foundational knowledge of Java.

Topics Covered:

- Java Basics: Syntax, variables, data types, operators, conditional statements, loops
- OOPS Concepts: Classes, objects, constructors, inheritance, polymorphism, encapsulation, abstraction
- Collections Framework: Introduction to List, Set, Map, and commonly used collection classes

Hands-on coding activities were conducted to help students apply the concepts effectively.

Day 2 – 05-12-2025

The second day introduced students to modern Java application development tools and frameworks.

Topics Covered:

- Spring Boot & RESTful Services:
 - Basics of Spring Boot
 - Creating REST APIs
 - Dependency Injection and Auto-Configuration
- Maven:
 - Project setup using Maven
 - Understanding POM files
 - Managing dependencies and build processes

Students were guided in creating a simple Spring Boot REST application during the hands-on session.

Day 3: 06-12-2025

The final day focused on deployment technologies and version control tools essential for real-world development.

Topics Covered:

- **Docker:**
 - Basics of containerization
 - Creating and running Docker containers for Java/Spring Boot applications
- **Render Deployment Platform:**
 - Hosting Java/Spring Boot applications on Render
 - Understanding deployment pipelines
- **Git & GitHub:**
 - Version control fundamentals
 - Repository creation, commits, push/pull operations
- **Database Connectivity on Render:**
 - How to connect database MySQL with deployed applications on Render
 - Environment variables and configuration management

Students gained hands-on experience deploying their applications to the cloud using Docker and Render, integrating Git/GitHub workflows.

Valedictory Session (06-12-2025):

- The valedictory program was conducted on the evening of 6th December 2025, marking the successful completion of the three-day workshop.
- Participants shared positive feedback and expressed appreciation for the quality of the technical sessions and hands-on learning experience.
- A brief summary of the three days was presented, highlighting the key outcomes and learning achievements.
- A formal vote of thanks was delivered, acknowledging the efforts of the resource person, coordinators, and participants in making the workshop successful.
- The session concluded with words of appreciation and encouragement for students to continue exploring Java and related technologies.

Outcomes of the Workshop:

- Students gained practical knowledge of core Java concepts, OOP, and collections.
- Participants learned to develop RESTful applications using Spring Boot and Maven.
- Students acquired hands-on experience with Docker for application containerization.
- They understood how to deploy applications to the cloud using platforms like Render.
- Learners improved their skills in version control through Git and GitHub.

Conclusion:

The workshop was successfully conducted and strengthened students' practical skills in Java and modern development tools. It provided valuable hands-on learning and encouraged students to explore advanced technologies.