

A Report on

7 Days International online Faculty Development Program on

Topic: Industry Grade JAVA – Integrating Testing Framework, SonarQube with a Mini Project

Organized By Department of Computer Science Engineering- Artificial Intelligence

In Association with Inspire Softech Solutions

27.09.2023-05.10.2023



MIT MADANAPALLE | **MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE** (UGC-AUTONOMOUS INSTITUTION) | **INSPIRE** Softech Solutions

Department of Artificial Intelligence

In Association with **INSPIRE SOFTECH SOLUTIONS** Conducting

7 Days Online International Faculty Development Program on Industry grade JAVA: Integrating testing framework, SonarQube with a Mini Project

Key Takeaways:

- Maven** Understanding the Project build using Maven
- JUnit** Testing the Functionalities using JUnit
- JACOBO** Checking the Code coverage using Jacoco
- sonarqube** Writing industry standard quality code using SonarQube
- Cypress** Web testing using Cypress framework
- POSTMAN** API testing using Postman
- Mini Project integrated with all the above mentioned technologies

Who can attend?

- Professionals
- Research Scholars
- College Faculty
- Trainers
- Students

Registration Link: <https://inspiress.in/courses.php>

www.inspiress.in
training@inspiress.in
98407 73715, 86674 93679

27th Sep - 05th Oct 2023
07.00 - 08.30 PM
Mode: Online (Google Meet)

Submitted by : Dr K Chokkanathan, Asso. Prof., Department of AI.

Report Received On 21-Oct-2023.

Key Points Discussed:

1. Understanding the Project build using Maven
2. Testing the Functionalities using Junit
3. Checking the Code coverage using Jacoco
4. Writing industry standard quality code using SonarQube
5. Web testing using Cypress framework
6. API testing using Postman

Maven is a build automation tool used primarily for Java projects. Maven can also be used to build and manage projects written in C#, Ruby, Scala, and other languages. The Maven project is hosted by The Apache Software Foundation, where it was formerly part of the Jakarta Project.

JUnit is a unit testing framework for the Java programming language. JUnit has been important in the development of test-driven development, and is one of a family of unit testing frameworks which is collectively known as xUnit that originated with SUnit. JUnit is linked as a JAR at compile-time.

SonarQube - SonarQube is an open-source platform developed by Sonar Source for continuous inspection of code quality to perform automatic reviews with static analysis of code to detect bugs and code smells on 29 programming languages.

There are two types of Java code coverage tools: first, tools that add statements to the Java source code and require its recompilation. Second, tools that instrument the bytecode, either before or during execution.

Cypress is a front-end testing tool for web applications. Cypress runs on Windows, Linux, and macOS. Cypress app is open-source software released under the MIT License while the Cypress Cloud is a web application. Cypress has been compared to Selenium.

Based on the above tools and techniques, a mini project was developed, and a demo given by the expert. The total number of participants in the FDP is 52. All the participants participated actively online and followed the instructions given by the instructor.

