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COMMITTED TO RESEARCH, INNOVATION AND EDUCATION 48 years

Date: 31.10.2026

Department of Computer Science and Engineering

A brief report on the ***Value Added Course on 'Object Oriented Programming - A Deep Dive into JVM",*** organized in offline mode from 3rd October 2026 to 31st October 2026 on Saturdays, from 1:00 PM to 4:00 PM in CSE Lab 2 by the Department of Computer Science and Engineering.

The resource persons for all the sessions of the Value Added Course is Mr. Mallampati Srinivas, Founder & CEO, TechyBees EduCon Pvt. Ltd. and faculty coordinators are Prof. S. China Ramu, Professor, Dr. G. Kiran Kumar, Dr. Kolla Morarjee, Associate Professor(s), Smt. I. Srujana, Smt. A. Sangeetha, and Dr. M Venkata Krishna Reddy, Assistant Professor(s) from Department of Computer Science and Engineering.

This Value Added Course is organized for the registered students of III semester CSE students. The number of participants who registered and attended were 36 in total. The inaugural session was hosted by Smt. I. Srujana, faculty co-coordinator and given a brief introduction about the Value Added Course Prof. S. China Ramu, Head of the Department delivered opening remarks during inaugural session. Valedictory session was hosted by Dr. G. Kiran Kumar, faculty coordinator and the feedback was collected from the participants at the end of the course. Smt. A. Sangeetha proposed a vote of thanks.

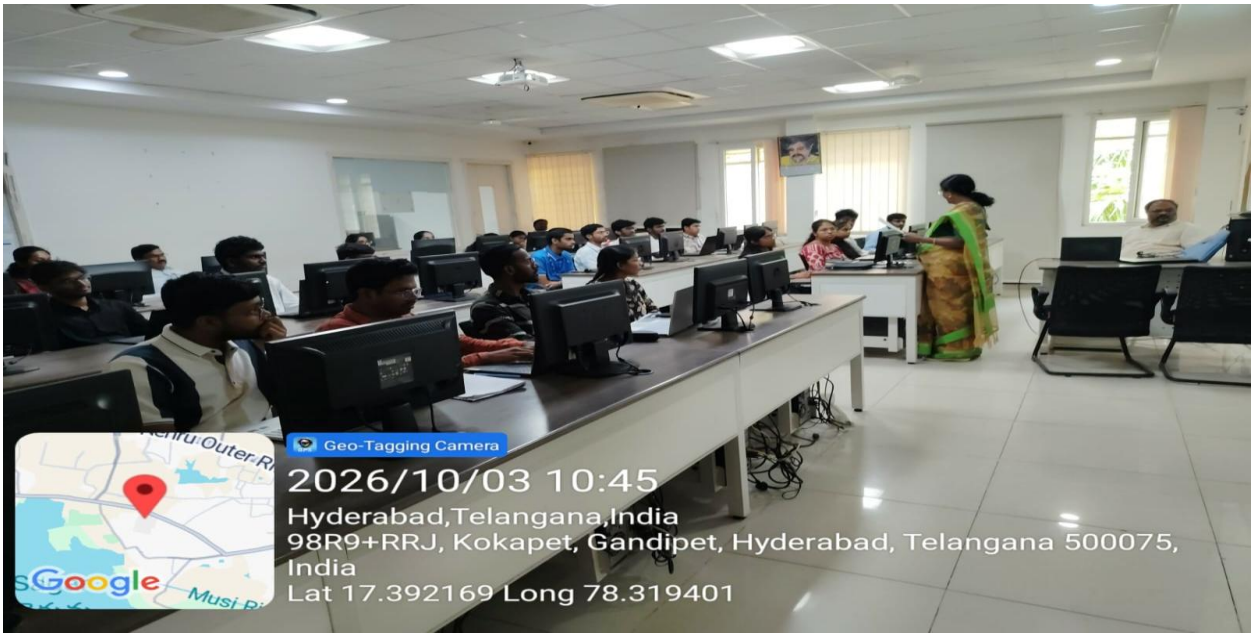
The objective of this course is to enhance students' coding skills in the area of Object Oriented concepts using Java which will be useful for their upcoming placement activities. It mainly focuses on hands-on experience in developing robust, modular, and reusable Java applications.

Inaugural Session:

The inaugural session was organized on 03.10.2026 from 1:00 PM to 1:45 PM in CSE Lab 2



Ms. I Srujana, Assistant Professor, Dept. of CSE and Faculty Coordinator hosting the Inaugural Session



Smt. I. Srujana, Assistant Professor, CSE Department welcoming the gathering, inviting the Resource Person, and briefly introduce the purpose of the Value Added Course.



Participants of the program in the Inaugural session

The day-wise summary of the Value Added Course is given below.

Day-1-(03-10-2026)

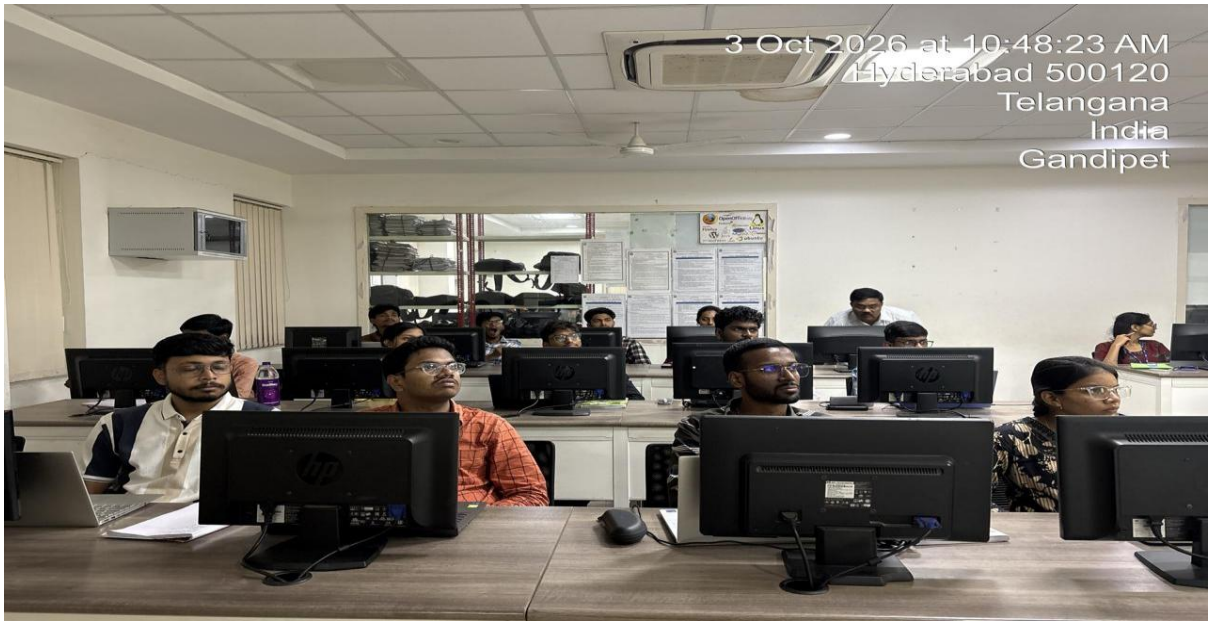
The first day of the course was conducted on 3rd October 2026 (Saturday) from 1:00 PM to 4:00 PM. The session was delivered by the resource person, Mr. Mallampati Srinivas, Founder & CEO, TechyBees EduCon Pvt. Ltd. The session witnessed enthusiastic participation from the shortlisted students of CSE III Semester. A total of 36 students attended the session.

The first day was dedicated to the Java Virtual Machine (JVM). Mr. Mallampati Srinivas explained how a Java program is compiled into bytecode and executed by the JVM, which makes Java platform independent. He then gave an in-depth view of the JVM architecture, covering the class loader subsystem, the runtime data areas (method area, heap, stack, PC registers and native method stacks), and the execution engine with its interpreter, Just-In-Time (JIT) compiler and garbage collector. He related these internals to object oriented concepts by explaining how objects, references and method calls are handled in memory during program execution. The session was highly informative and interactive, and the students actively participated by clarifying their doubts.

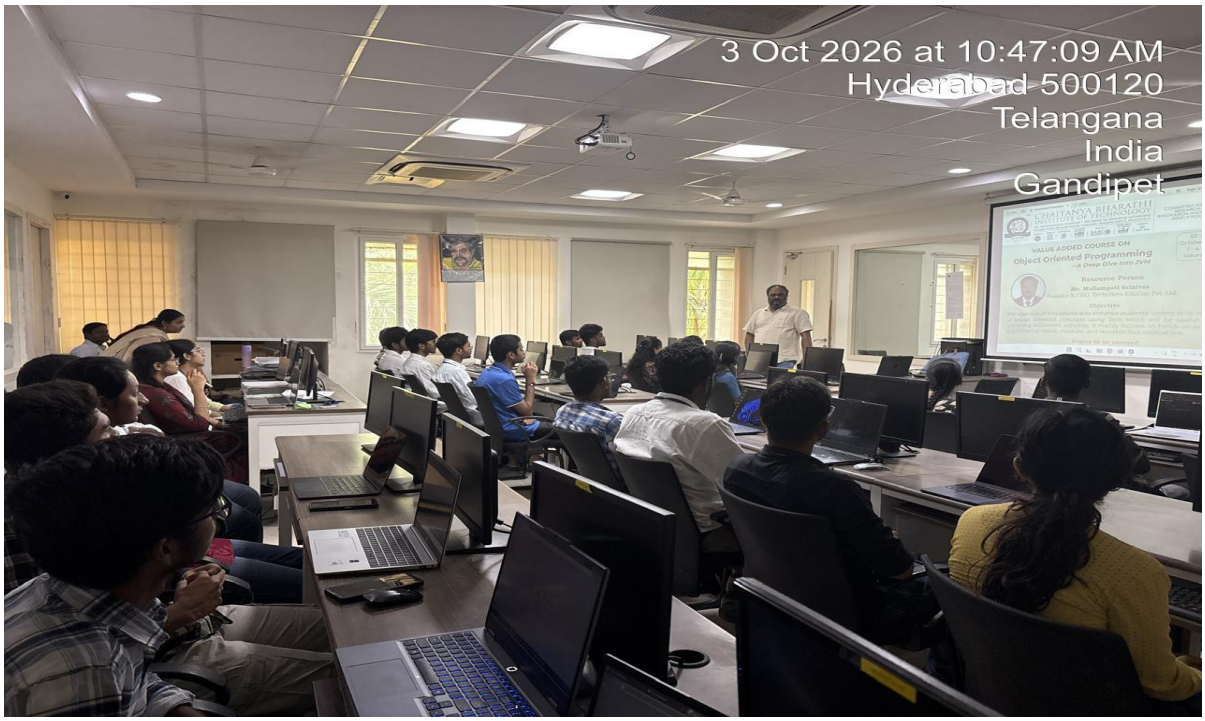
The session proved to be highly beneficial for the students, strengthening their understanding of how Java programs execute internally and preparing them for the upcoming sessions on IO Streams, Collection Framework, Multithreading and the Capstone Project. The department thanks the resource person for sharing his expertise, and the department administration and the organizing team for the successful conduct of the event.



Mr. Mallampati Srinivas, Resource Person delivering the session on Day 1



Participants attending the Course on Day 1



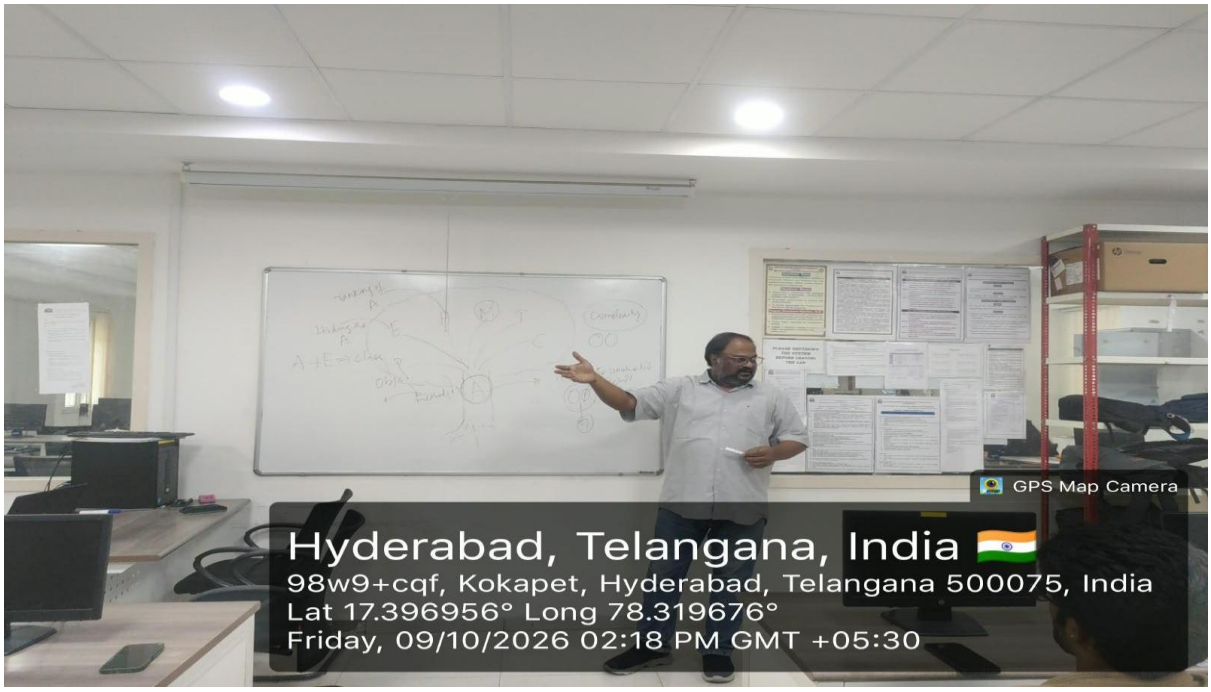
Resource Person, continuing the session on Day 1

Day-2- (09-10-2026)

The second day was dedicated to the OOPs Concepts. Mr. Mallampati Srinivas focuses on understanding how Java supports object-oriented design and how these concepts help in developing modular, reusable, and maintainable software applications. The main objective of this talk is to introduce students to the fundamental concepts and principles of Object-Oriented Programming. He then gave an in-depth view of the implementation of encapsulation, abstraction, inheritance, and polymorphism. He explained several realtime case studies on these concepts with hands-on expertise.

The second day of the value added course proved to be highly beneficial for the students to understand the fundamental principles of OOP and their implementation in Java. Students gained knowledge of object-oriented design, code reusability, data security, and modular programming. The session also encouraged students to apply OOP concepts in developing Java-based applications. The technical talk on OOP Concepts through Java provided

valuable insights into object-oriented programming and its significance in software development. The session enhanced students' programming knowledge and provided a foundation for learning advanced Java concepts and application development.



Mr. Mallampati Srinivas, Recourse Person, delivering the session on Day 2



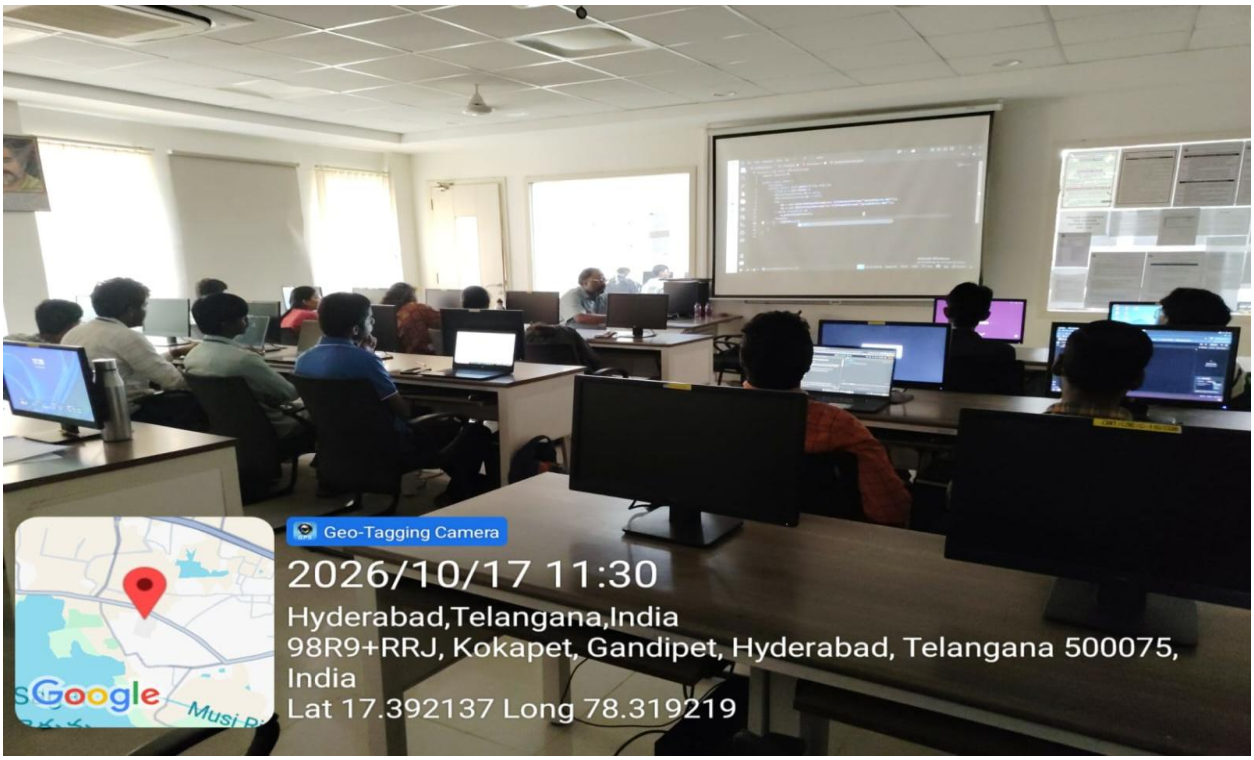
Participants attending the session 1 & 2 on Day 2

Day-3 (17-10-2026)

Forenoon Session – Persistence in Java

The session introduced persistence: the ability of an object's state to outlive the program that created it. The resource person explained serialization, which converts an object into a stream of bytes so that it can be stored in a file or a database, or sent over a network. Deserialization is the reverse process, which rebuilds the object in the JVM. Students learned:

- The difference between serializable and non-serializable objects, and the role of the Serializable interface;
- The importance of the serialVersionUID, which checks during deserialization that the stored object matches the class version;
- Why objects are stored in binary form, and how they are later read back into the JVM;
- Other aspects of persistence, such as transient fields.



Resource Person delivering the Forenoon session on Day 3

Afternoon Session – Java Collection Framework

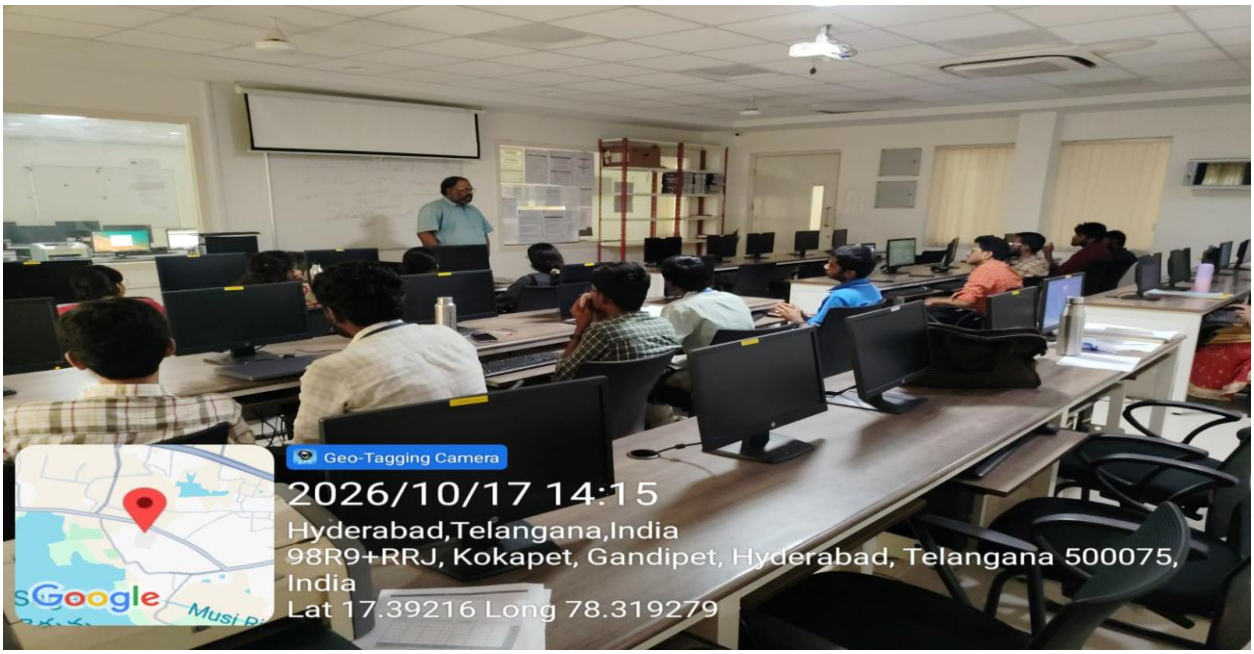
The second session covered the Collection Framework in the java.util package. The resource person explained the full hierarchy of interfaces and classes:

- The Collection hierarchy: List, Set and Queue, down to implementations such as ArrayList and LinkedList;
- The Map hierarchy, down to HashMap;
- The abstract classes that connect the interfaces to the concrete classes.

The session stressed choosing the right collection for a given problem and its requirements, such as ordering, duplicates, search speed and insertion cost, rather than picking one at random. Examples showed how each choice works in practice.

Outcome

Students gained practical knowledge of object persistence and of choosing efficient data structures with the Collection Framework, both widely used in industry. The interaction with the industry expert helped them see how these concepts are applied in real projects. The sessions were informative and well received.



Resource Person delivering the Afternoon session on Day 3

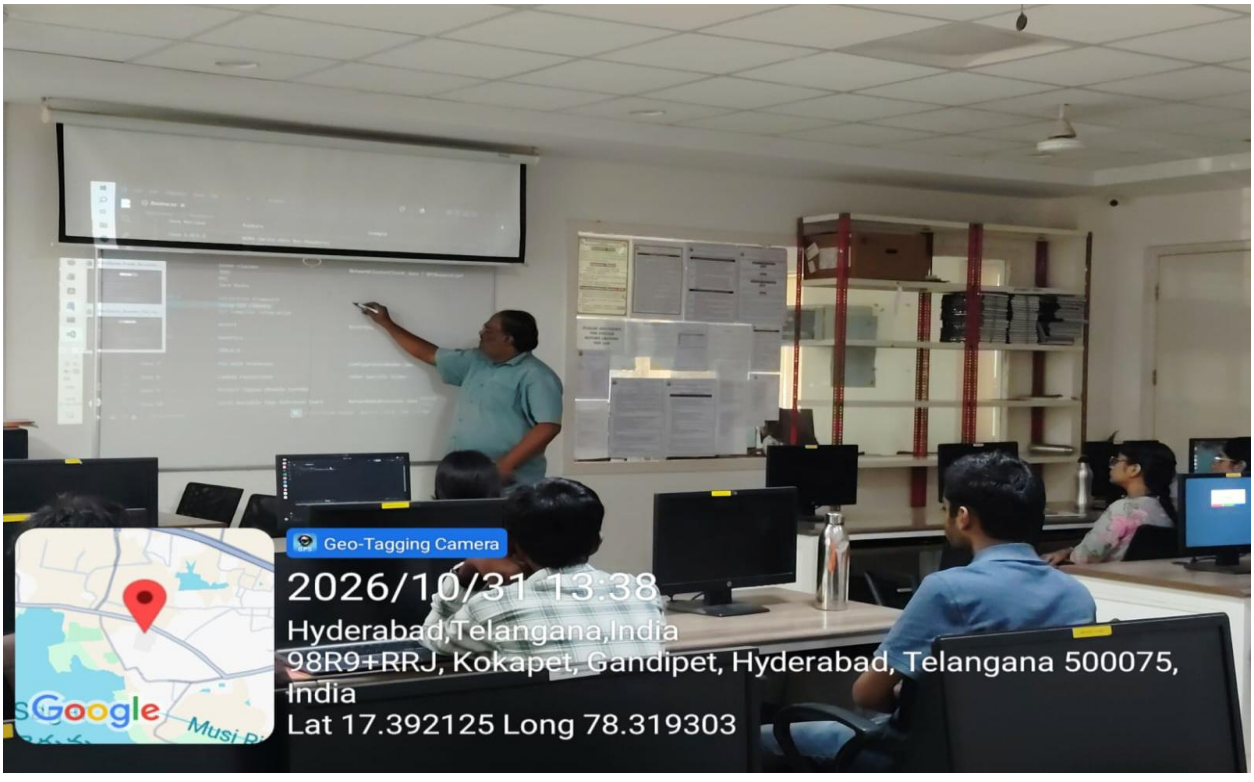
Day-4-(31-10-2026)

Evolution and Advanced Features of Java

The session focused on the evolution of Java and the major features introduced across different JDK versions, from JDK 1 to JDK 26. The resource person explained the concepts of Applets, AWT and Swing, highlighting their role in GUI development and platform independence. The session also covered Generics, JDBC, JavaBeans, Assertions, Annotations, Variable Arguments (Varargs) and the NIO package. The resource person briefly explained their features, purpose and applications in Java programming.

Outcome

Students gained an overview of Java's evolution and its important features, along with an understanding of advanced Java concepts and their practical applications. With this session, the Value Added Course was successfully concluded.



Resource Person, delivering the session on Day 4

Enclosed:

- Event Flyer & Schedule
- Attendance Forms
- Feedback Form & Responses
- Assignment Form
- Registration Details
- Profile of Resource Person
- Approval Letter
- Sample certificate

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