

SDM College of Engineering & Technology, VII Semester B.E.
CS409 Advance Object Oriented Programming with Java (4-0-2) 4

Course Learning Objectives:

CLO. 1. At the end of the course, the student should understand the basics of object oriented system design and development using features of java language which includes: Core and Advanced java language concepts like: database transactions, networking, RMI, Servlets, JSP and Beans.

Course Outcomes :

The following are the identified Course Outcomes (CO):

CO. 1. Knowledge of fundamental object oriented (OO) philosophy and concepts and modeling solution for a given problem description. (PO C, E; Strength of correlation CO PO is 2/12)

CO. 2. Capability to develop applications through CORE JAVA features like: Events, Exceptions, built-in java objects, Streams, Threads, Applets and Frames, AWT and Swings (PO C, E ; Strength of correlation CO PO is 2/12)

CO. 3. Knowledge and capability to develop applications through different type of database connectivity and storage & retrieval of information stored in multi-databases. (PO C, E; Strength of correlation CO PO is 2/12)

CO. 4. Knowledge and capability to develop applications using networking features of java language. (PO C, E; Strength of correlation CO PO is 2/12)

CO. 5. Knowledge and capability to develop applications using SERVLETS and JSP features of java language. (PO C, E; Strength of correlation CO PO is 2/12)

CO. 6. Knowledge and capability to develop Enterprise Applications using Enterprise Javabeans (PO C, E Strength of correlation CO PO is 2/12)

Prerequisites:

- i. Exposure to object oriented programming philosophy, concepts and practices.
- ii. Knowledge of basic features of Java.

Course Contents:

- 1) Review of Core Features of Java: Exceptions, Threads, Event Handling, Applets, Streams, Generics, Collections Framework, Utility Classes **20 Hrs.**
- 2) Advanced Java- Part-1: Database Programming, Network Programming, and RMI. **16 Hrs**
- 3) Advanced Java- Part-2: Servlets, JSP and Javabeans. **16 Hrs**

Additional contents beyond the syllabi:

1. Case studies on real-time problem issues. (PO B,C,D,E)
2. Exposure to Software Tools and IDEs for Design & Implementation. (PO I.K).
3. Database transactions using multithreading. .(PO J)
4. JDBC connectivity to multiple DBMSs. (PO K).
5. Web application using contemporary technologies. (PO J)

- 1) [Herbert Schildt - Java - The Complete Reference 7th edition. Tata McGraw Hill,](#)
- 2) Jim Keogh- J2EE - The Complete Reference, Tata McGraw Hill, 2007.
- 3) Y. Daniel Liang- Introduction to JAVA Programming, 6th edition, Pearson
- 4) Stephanie Bodoff et al- The J2EE Tutorial, 2nd edition, Pearson Education, 2004.
- 5) Bryan Basham, Kathy Sierra & Bert Bates- Servlets and JSP, Head First Series- 2nd Edition, O'reilly Publication-2010.

References

- 1) [Java in 60 minutes a day](#)

[Resources Link by Prof. Govind N](#)