



STANLEY
COLLEGE OF ENGINEERING & TECHNOLOGY FOR WOMEN
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Address : Chapel Road, Abids ,Hyderabad

SE-506

DISTRIBUTED COMPONENT ARCHITECTURE

UNIT-I

Software Architecture: Introduction - Software Architecture - Definition – needs, approaches, roles of Software Architecture. Evolution of Distributed Systems - Distributed Objects - Methods of distribution - Component Concepts - Introduction to UML.

UNIT-II

Common Object Request Broker Architecture: History of CORBA - CORBA architecture - CORBA object life cycle - CORBA invocation life cycle - Performance Considerations. CORBA services: CORBA Object location service - CORBA messaging service - CORBA Event Service -CORBA Security Service - CORBA Object Transaction Service.

UNIT-III

Distributed Component Object Model: Microsoft DCA - DCOM Architecture - Interfaces and Object Identification - COM IDL - Look up strategies in COM - Type Libraries - Exploring IUnknown and IClass Factory - Standard and Custom Marshalling. DCOM services: Persistence service- COM security service- Clustering in COM- MS Transaction Service

UNIT-IV

Enterprise Java Beans: J2EE architecture- Enterprise Beans as distributed objects - Inside Enterprise beans- The EJB Container- Types of Beans-Passivation and Activation - Message Driven Beans, Comparison of EJB, COM, CORBA and .NET.

UNIT-V

Service Oriented Architecture: Introduction to Web Services- Introduction to Service Oriented Architecture- Business value- Architectural elements- Web services and SOA.

Suggested Reading:

1. George T Heineman and William T Councill , “*Component-based Software Engineering: Putting the pieces together*”, Addison-Wesley, USA, 2001.
2. Sudha Sadasivam G, “*Distributed Component Architecture*”,