## SHORT NOTES / JAVA IDL

- 1. JAVA IDL is for CORBA programmers, this is business as usual
- 2. Using JAVA IDL java adds CORBA capability to JAVA language giving interoperability and connectivity based on Standards
- JAVA IDL enables a distributed , web enabled java application to transparently invoke operations on remote network services using industry standards OMG IDL and IIOP
- 4. JAVA IDL technology is for programmers who needs to program for CORBA interfaces
- 5. Each language that support CORBA has mapping for CORBA based interfaces



- 6.
- On the client side application includes a reference for the REMOTE object
- 8. That object reference has a STUB method , which is a stand in for the method being called remotely
- The STUB is actually wired into the ORB, so that it invokes the ORB'S connection capabilities which forwards the invocation to the server
- 10. On the server side, the ORB uses SKELETON code to translate the REMOTE invocation into a METHOD CALL on the LOCAL object. The skeleton translates the cal and any parameters to their implementation specific format

- 11. When the method returns , the SKELETON code TRANSFORMS results or errors and sends them back to the client via the ORBS
- 12. Between ORB(S) communication proceeds by means of s SHARED PROTOCOL. IIOP (Internet Inter ORB Protocol)
- 13. IIOP defines HOW CORBA compliant ORB(S) pass information back and forth
- 14. CORBA object are described by IDL (Interface Definition Language)
- 15. If a JAVA client is invoking CORBA server , the server has an IDL interface describing the object
- 16. CORBA can be difficult to use if SERVER / CLIENT is behind a firewall or network address translation being used
- 17. CORBA does not support DISTRIBUTED GARBAIGE COLLECTION
- 18. RMI supports DISTRIBUTED GARBAGE COLLECTION
- 19. CORBA usually provides following services
  - a. Object life cycle Defines how CORBA objects are created , removed , moved and copied
  - b. Naming Defines how CORBA objects can have friendly symbolic names
  - c. Events Decouples the communication between distributed objects
  - d. Relationships Provides arbitrary typed n-ary relationships between CORBA objects
  - e. Externalization Coordinates the transformation of CORBA object to and from external media
  - f. Transactions Coordinates atomic access to CORBA objects

## LIYANA ARACHCHIGE RANIL

- g. Concurrency Control Provides a locking service for CORBA objects in order to ensure serializable access
- h. Property supports the association of name value pairs
- i. Trader Supports the finding of CORBA objects based on properties describing the service offered by the object
- j. Query Supports queries on objects