# SMART CLIENT, DATA STORE, APPLICATION AND ENTERPRISE SERVER BASED ARCHITECTURE

Lesson 04
Directory Service

#### **SERVICE**

 Service means software or protocol for specifications and provisions for a set of operations with the given objects or entries

#### **DIRECTORY SERVICE**

- Directory service means a service protocol, which specifies and facilitates provisions for the set of operations with the given objects or entries in a directory
- The directory is an efficient way of storing and accessing data

#### **DIRECTORY TREE-LIKE STRUCTURE**

- Tree-like structure with entries at the tree leaves and nodes representing the printers, documents, persons, organizational units
- Groups of persons, or anything else, which may represent a given entry or multiple entries at the tree

### LIGHTWEIGHT DIRECTORY ACCESS PROTOCOL (LDAP)

- An open-source networking protocol for accessing, modifying, and querying
   TCP/IP directory services
- Lightweight means that the protocol does not depend on the OS and system resources

#### LDAP

- Accessing, querying, or modifying an object in LDAP involve a tree of directory entries
- An entry consists of a set of named attributes with values
- Some attributes are mandatory and some are optional

#### LDAP USES

 Most services as a simple starting point for their database organization

#### BASIC LDAP OPERATIONS

(i) bind, (ii) start TLS (transport layer security) protocol, (iii) add entry, (iv) delete an entry, (v) modify DN, (vi) abandon to abort an earlier request, (vii) search, (viii) compare, (ix) extend, and (x) unbind

#### SUMMARY

- Directory service— a service protocol, which specifies and facilitates provisions for the set of operations with the given objects or entries in a directory
- LDAP— an open-source networking protocol for accessing, modifying, and querying TCP/IP directory services

## End of Lesson 04 Directory Service