

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

Lesson 03

Personal Information Manager

PERSONAL INFORMATION MANAGER (PIM)

- Has APIs in Smart mobile phone devices for managing data copies for device user
- Manages the copies of data record
- Multiple selections and options provided by the PIM APIs, for example, calendar, address book, and tasks-to-do

PIM

- Includes creation of copies
- Updating
- Replacement
- Addition
- Deletion of data records
- Responsible for sending a data record to an API and receiving it from another API

SORTING BY PIM

- Sorting of the data records configurable according to first alphabet of the name
- As per calendar (entries in a list for tasks-to-do at current date first followed by entries for next date)
- As per last name in the names at the list of Contacts (entry of last name with first alphabet as A first and as Z last)
- As per priority

ADDRESS BOOK

- A list of contacts with their office, home, mobile, and fax numbers, home and office addresses, web addresses, and email IDs

TASK-TO-DO

- Tasks-to-do a list of tasks planned by the device user, which also provides along with each task the time at which to do the task
- Reminds the user of the tasks as per their planned time

RECORD COPIES SYNCHRONIZATION

- With the copies on a personal area computer, WPAN computer, a remote system, or another mobile device

BACKUP OPTION

- For mobile device backup of the PIM data records to protect the user due to accidental deletion or battery power
- When the mobile device connects to a personal area computer, WPAN computer, a remote system, or another mobile device, the copies transfer completely to a selected directory
- The backup enables restoration later

RESTORE OPTION FOR SYNCHRONIZATION

- Mobile device may lose the PIM data records, for example, due to accidental deletion or battery power loss
- Restore helps in restoring the copies at the device

RESTORE OPTION FOR SYNCHRONIZATION

- When the mobile device connects to a personal area computer, WPAN computer, a remote system, or another mobile device, the copies synchronized with the copies at the latter and the computer copies the selected or whole data to the device

'REPORTS' OPTION

- Provides a device with the entries for added, deleted, or modified data copies at the other device or PC
- Not only specifies time and date of last synchronization but also gives reports of synchronization failures

CONFIGURATION OPTION AND SETTING PREFERENCE OPTIONS

- Configuration option
- Setting of preferences for synchronization— User Selection or Auto
- Setting the preferences of connection preference— Can be configured as Bluetooth, IrDA (infrared data association), USB, or COM port cable

USER SELECTION CONFIGURATION

- Means synchronization done only when user selects the option 'synchronize'

AUTO CONFIGURATION OPTION

- Synchronization done automatically on connection between the device and computer

DATA SYNCHRONIZATION FORMATS

- The data formats at the server and the device can be different from each other
- When the data at source synchronizes with the data at the other end, it does so as per the format specified at that end
- Synchronized data copies at the device

INDEXING OF PIM DATA AT THE DEVICE

- Used to retrieve the queries
- **For example, indexed as per the first alphabet in the name**
- **Contact name data is indexed as per the information, name, telephone number, address, e-mail address, and Web address**

DEVICE SPECIFIC FORMATS FOR AUDIO SYNCHRONIZATION

- Apple audio communication (AAC) files used for audio communication with an Apple iPod
- A file in AAC format synchronizes with the music files in some other format at a computer or remote website serving the music files

DEVICE SPECIFIC FORMATS FOR CONTACTS INFORMATION SYNCHRONIZATION

- vCard format, while calendar, tasks-to-do list, and journal information are in vCalendar, vToDo, and vJournal formats at another mobile device

SUMMARY

- Personal Information Manager PIM
- PIM APIs for address book
- Task-to-do
- Calendar
- Contacts
- Backup, Restoration and Configuration
- Device specific formats for data synchronization with PIM at server

End of Lesson 03
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