Smart Client, Data Store, Application and Enterprise Server Based Architecture

Lesson 02

Data Store Objects

DataStore

- DataStore means a data repository of a set of integrated objects

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DataStore objects

- Consist of data as well as associated methods for data usage

- DataStore objects for an app at different computing tiers

- When modifies at a tier, synchronize with other tiers at the client or server ends.

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Data Store Object Synchronization

- Any change at a tier reflects at all other tiers by a process of synchronization

- The server messages and sends the changes or alerts to the client

- It enables maintenance of consistent DataStore objects

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Apps in the smart client

- Access DataStore and caches at the device

- Web app data storage is at DataStore objects at the mobile device and server

- *DataStore means a data repository of a set of integrated objects*

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DataStore objects model

- Uses the classes defined in database schemas

- A schema object means specifications of a logical data storage structure

- The object types can be files, e-mails, messages, databases, distributed DataStores, and directory services

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A database schema

- The structure in a language supported by the DBMS

- Describes the organization of data, construction of database, and the tables in RDBMS

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RDBMS Schema

- A set of relations (integrity constraints) imposed on a database

- The constraints specified in the same database language

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Device data storage

- Enables access to an application even when the mobile device disconnects from the network

- DataStore at the mobile device and server maintain persistency

DataStore Persistency

- Persistency in the context of mobile devices means the data remains intact till deleted even if the device power is interrupted

- Also implies that a change in data during an operation is simultaneously stored and reflected at all related files in a file system, database, or any other record

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Summary

- DataStore means a data repository of a set of integrated objects

- DataStore Objects integrated

- Persists at Client (device) as well as server

- Synchronize for consistence of stored data

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End of Lesson 02

Data Store Objects