



Foundation University
Rawalpindi Campus

Introduction to Database Systems – CSC - 221

A Presentation by

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RECAP

o I REMEMBER..... Do You ????????

Objectives of Today's Lecture

database

Types of Databases

CABAS
MINISTR

DBA

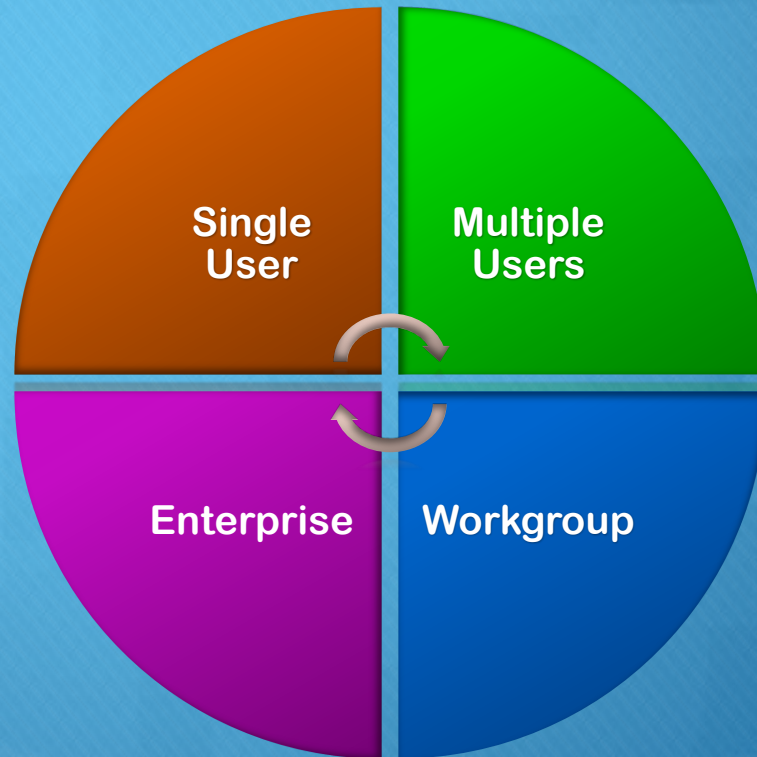
DBMS

DBMS

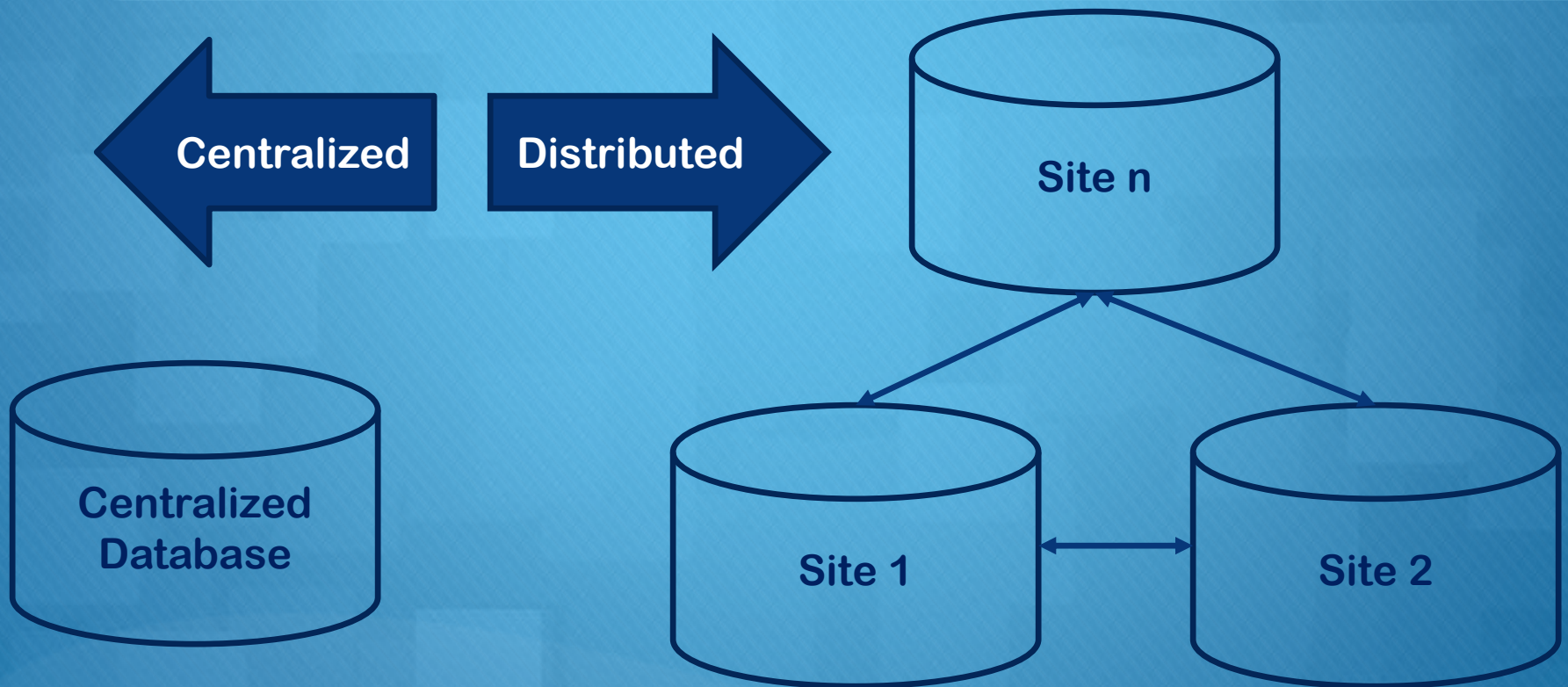
Types of Databases



User Supported Databases



Location Based Databases





Data/Purpose Based Database

General Purpose

Specific Purpose

Usage/Time Sensitive Database





Structure of Data Based Database



Unstructured Data



Structured Data



Semi structured Data



- In a database environment,
- **Primary resource** – database
 - **secondary resource** – DBMS and related software.

 - **Administering resources responsible** – **database administrator (DBA)**.

 - **Responsible for**
 - **Authorizing access**
 - **Coordinating and monitoring** – Use
 - **Acquiring software and hardware resources.**
 - **Accountable for problem** – security breaches and poor system response time.



Database Management System

- Allow users to create new databases and specify their *schemas* (logical structure of the data), using a specialized *data-definition language*.
- Give users the ability to *query* the data (a “query” is database lingo for a question about the data) and modify the data, using an appropriate language, often called a *query language* or *data-manipulation language*.
- Support the storage of very large amounts of data — many terabytes or more — over a long period of time, allowing efficient access to the data for queries and database modifications.



Database Management System

- Enable *durability*, the recovery of the database in the face of failures, errors of many kinds, or intentional misuse.
- Control access to data from many users at once, without allowing unexpected interactions among users (called *isolation*) and without actions on the data to be performed partially but not completely (called *atomicity*).



**AND THAT IS
FAREWELL TO
DAY FIVE 😊**