MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE

(UGC - AUTONOMOUS)

Report on
A Guest Lecture on
Databases: Current & Future Trends
23 February 2019

Submitted by : Dr. Ghanashyam S.Bopche, Sr. Assistant Professor, Dept. of Computer Science & Technology

Resource Person: - Mr L Chandrahas, Senior Software Engineer, Aricent Technologies Bangalore

Title: Databases: Current & Future Trends
Venue: Mechanical Seminar Hall (South Block)
Audience: II B. Tech CSIT and IT Students (50)

The guest speaker **Mr. L Chandrahas** covered the following topics which are useful for the implementation of mini projects and main projects for B. Tech students.

1. **Evolution to Databases**: - He explained the transformation of databases from network, hierarchical, relational and object-oriented models.

2. **Types of Databases: -** He distinguished the relational and non-relational databases types. Relational DB types are relational tables consist of rows and columns, but non-relational DB types are document stores, key value stores, wide column stores, graph databases and search engines.

3. **Comparison of databases**: -He has given statistical analysis and ranking on the following databases such as Oracle, MySQL, Microsoft SQL Server, PostgreSQL, MongoDB, IBM DB2, Redis and SQLite.

4. **Selection of DB for your application**: -The parameters or factors are explained for selection of a database for choosing any application. The factors are data model, Query requirements, data consistency, speed, scalability, Reliability and Security.

5. **Oracle 11g Vs Oracle 18c: -** The features such as Multitenancy, In-memory column store, Native JSON support are compared with 11g and 18c.

6. **Advanced features of Oracle Database 18c**: **-** The Oracle 18c supports for cloud applications and most of exiting features are enhanced. He highlighted the multitenant architecture of oracle 18c which is good in terms of performance, security, scalability and support for data warehousing and Big data. The future trend of the database is oracle 18c with few more enhancements which supports for heterogeneous and complex data types.

The session ended with an interactive session with the students followed by vote of thanks proposed by Dr. Ghanashyam S.Bopche.