Meeting Minutes - DAY 15

Meeting Topic	Date	Time
Optimizing SQL Queries for Efficient Data Retrieval and Analysis	16/05/2024	11:30 AM to 1:00 PM
Company	**Location**	**Mode**
FUTURENSE	Jain University - SET	Online: Via Zoom

ATTENDEES

- FUTURENSE TECHNOLOGIES
- SPEAKER: MR. AKASH DAS
- 2ND YEAR STUDENTS OF CSE - ARTIFICIAL INTELLIGENCE & DATA ENGINEERING OF JAIN UNIVERSITY SET: FROM USN: 22BTRAD001 -22BTRAD030

AGENDA

1. REVIEW SQL QUERIES FOR RETRIEVING EMPLOYEE INFORMATION FROM USA OFFICES.
2. UNDERSTAND THE EXECUTION ORDER OF SQL QUERIES AND THE ROLE OF SUBQUERIES.
3. DISCUSS QUERY OPTIMIZATION TECHNIQUES SUCH AS CONVERTING SUBQUERIES TO JOINS.
4. RETRIEVE CUSTOMER INFORMATION FOR THE HIGHEST PAYMENT USING SQL.

DISCUSSION

1. WE REVIEWED SQL QUERIES TO RETRIEVE EMPLOYEE INFORMATION FROM USA OFFICES, FOCUSING ON BOTH JOIN AND SUBQUERY APPROACHES.
2. EXPLORED THE EXECUTION ORDER OF SQL QUERIES AND DISCUSSED HOW SUBQUERIES ARE INTERNALLY CONVERTED TO JOINS FOR OPTIMIZATION.
3. CONSIDERED DIFFERENT TECHNIQUES FOR RETRIEVING DATA, SUCH AS USING ORDER BY DESC AND MAX() FUNCTION.
4. DISCUSSED THE ADVANTAGES AND SCENARIOS WHERE SUBQUERIES AND JOINS ARE PREFERRED.

DECISION

1. IT WAS DECIDED TO USE A SUBQUERY APPROACH TO RETRIEVE THE CUSTOMER INFORMATION FOR THE HIGHEST PAYMENT.
2. THE TEAM AGREED ON THE IMPORTANCE OF UNDERSTANDING SQL QUERY EXECUTION AND OPTIMIZATION TECHNIQUES FOR EFFICIENT DATABASE OPERATIONS.
3. IT WAS EVIDENT THAT STUDENTS HAVE REACHED AN INTERMEDIATE LEVEL IN MYSQL DATA ANALYSIS, UNDERSTANDING QUERY EXECUTION, OPTIMIZATION TECHNIQUES, AND UTILIZING FUNCTIONS LIKE SUBQUERIES AND JOINS EFFECTIVELY.

ACTION ITEMS

1. IMPLEMENT THE SQL QUERY TO RETRIEVE CUSTOMER INFORMATION FOR THE HIGHEST PAYMENT USING THE MAX() FUNCTION.
2. EXPERIMENT WITH DIFFERENT OPTIMIZATION TECHNIQUES AND COMPARE QUERY PERFORMANCE.
3. DOCUMENT THE KEY LEARNINGS FROM THE DISCUSSION REGARDING SQL QUERY EXECUTION AND OPTIMIZATION.

ASSIGNMENTS

1. COMPLETE ASSIGNED TASKS: DISCUSSION 7 AMD DISCUSSION 51, DUE BY EOD (16/05/2024).
2. UPLOAD THIS SESSION'S MOM.

NEXT MEETING

SCHEDULED FOR 17/05/2024 FROM 11:30 AM TO 1:00 PM AND 2:00 PM TO 3:40 PM.