

MERN Stack Training

Company: Sensation Software Solutions

Student Name: Gurvinder Singh

Training Duration: 6 Months

Days: 41

Objective of the Day

The objective of Day 41 was to begin learning **database concepts** and understand **MongoDB**, its role in backend development, and why it is used in MERN stack applications.

Work Done on Day 41

The training session started with an introduction to **databases**. The trainer explained the difference between **relational databases (SQL)** and **non-relational databases (NoSQL)** with real-world examples.

MongoDB was introduced as a **NoSQL, document-oriented database** that stores data in a flexible JSON-like format called **BSON**.

Why MongoDB in MERN Stack

The trainer explained why MongoDB is preferred in MERN stack:

- Schema-less structure
- High scalability
- Easy integration with JavaScript
- Faster development cycle

MongoDB's flexibility makes it suitable for modern web applications where data structure can evolve over time.

Basic MongoDB Concepts

The following core concepts were explained in detail:

- Database
- Collection
- Document
- Fields

The comparison between **tables (SQL)** and **collections (MongoDB)** helped in better understanding.

Hands-on Practice

Practical work included:

- Installing MongoDB
 - Using MongoDB Compass
 - Creating a database
 - Creating collections
-

Conclusion

Day 41 helped in understanding the **importance of databases** and provided a strong introduction to MongoDB fundamentals.