



NEW HORIZON COLLEGE OF ENGINEERING

Expert Talk on Designing Scalable Applications with MongoDB

**Organized by
Department of MCA**

Date: 28th June 2025

Venue: B305

Brief Description of the Event

The Department of MCA successfully organized an Expert Talk on “Designing Scalable Applications with MongoDB,” aimed at introducing students to the principles and practices involved in building applications that can handle growth in users, data, and workload efficiently.

Introduction of the Resource Person

Ms. Meghana R, a student from II semester MCA, introduced the resource person, Mr. Maddi Abhilash, to the gathering. He currently serves as a Senior Software Developer at Anthology Inc. With an expertise in .NET, C#, RESTful API design, and Azure cloud services, Mr. Abhilash has led several successful projects and AI integrations in enterprise applications. His role involves building scalable backend systems, optimizing SQL performance, and deploying intelligent automation solutions to improve software efficiency and user experience.

Content Delivery by the Resource Person

Mr. Maddi Abhilash delivered an insightful session, focusing on how modern applications can efficiently manage growing data and user load using NoSQL database solutions. Key topics covered are mentioned below.

- Introduction to Scalability
- Characteristics of a Scalable Application
- Role of Databases in Scalability
- Caching for Performance

- Indexing and Performance Optimization
- Handling Large Datasets with Sharding

The session began with a clear explanation of scalability in software systems and its importance for applications that handle growing user demands. Mr. Abhilash discussed key characteristics of scalable systems such as modular design, fault tolerance, and high responsiveness.

He emphasized the role of databases, especially MongoDB, in achieving scalability and introduced caching techniques to enhance performance and reduce load. He also explained how indexing improves query speed and how sharding helps manage large datasets by distributing them across multiple servers.

Real-world examples and use cases helped students relate the concepts to practical applications. The session concluded with best practices for designing scalable and efficient systems using MongoDB.

Interactive Session with Students

The session concluded with an engaging Q&A segment, where students actively participated by asking questions related to scalability, MongoDB features, and real-world implementation strategies. The discussion encouraged knowledge sharing and helped clarify core concepts, allowing students to gain a deeper understanding of designing scalable applications using MongoDB.

Activities Conducted

During the Q&A session, the resource person presented scenario-based questions to the students related to real-world scalability challenges and database performance issues. One such scenario involved designing a student portal where thousands of students can access academic records simultaneously during exam result publication. Students were asked to suggest how MongoDB could be used to handle this load effectively using techniques like indexing, caching, and sharding.

No of Participants: 52

Winners (if any, for activities conducted): NA

Guest Details: (Name, Designation, Organisation, Location):

Mr. Maddi Abhilash

Senior Software Developer

Anthology Inc, Bengaluru.

Photographs of the Event





Bengaluru, Karnataka, India

New Horizon College Of Engineering Vishveshwaraya Block, Kaverappa Layout, Kadubeesanahalli, Bengaluru, Karnataka 560103, India
Lat 12.934455° Long 77.692991°
28/06/2025 11:44 AM GMT +05:30



Department of Master of Computer Applications

Expert Talk

Designing Scalable Applications with MongoDB



28th June 2025



10:00 AM - 12:00 PM



Tejas Seminar Hall



2nd Semester Students



Mr. Maddi Abhilash

Senior Software Developer
Anthology Inc.

Faculty Coordinator

Dr. Sukanya N S

Senior Assistant Professor - MCA

Convenor

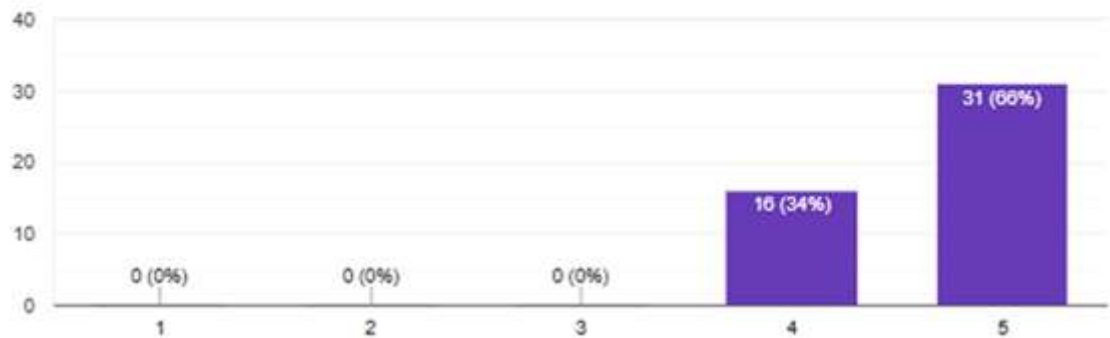
Dr. Asha V

Professor and Head - MCA

Feedback

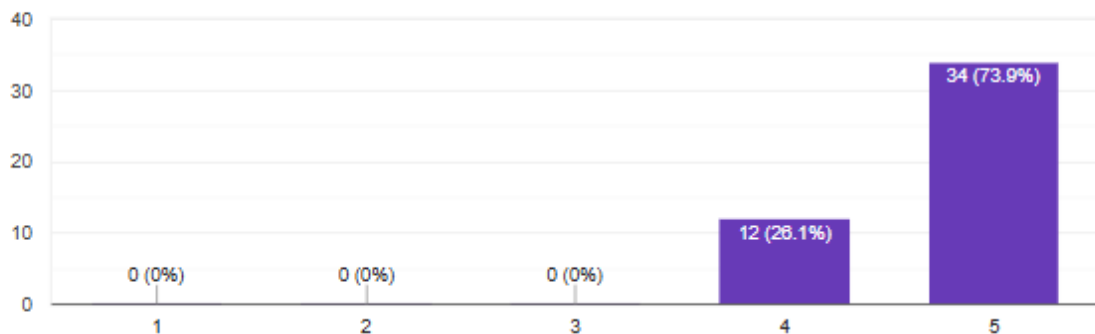
How would you rate the overall quality of the Expert Talk session on "Designing Scalable Applications with MongoDB"

47 responses



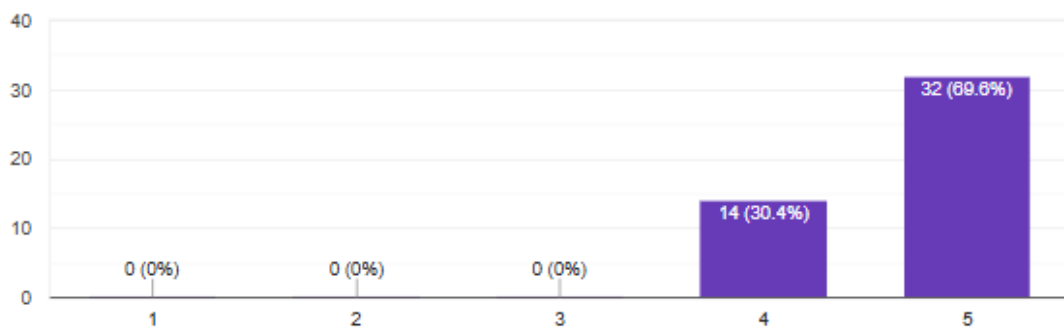
How would you rate the speaker's subject knowledge in MongoDB and the clarity of the presentation?

46 responses



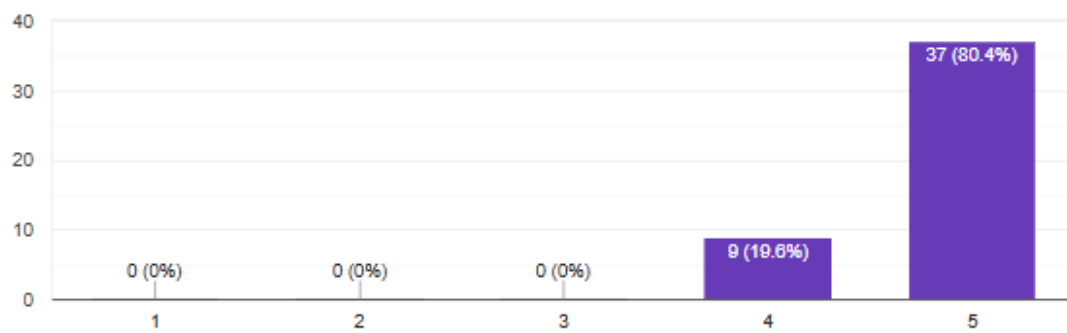
Rate the effectiveness of the examples depicted during the session.

46 responses



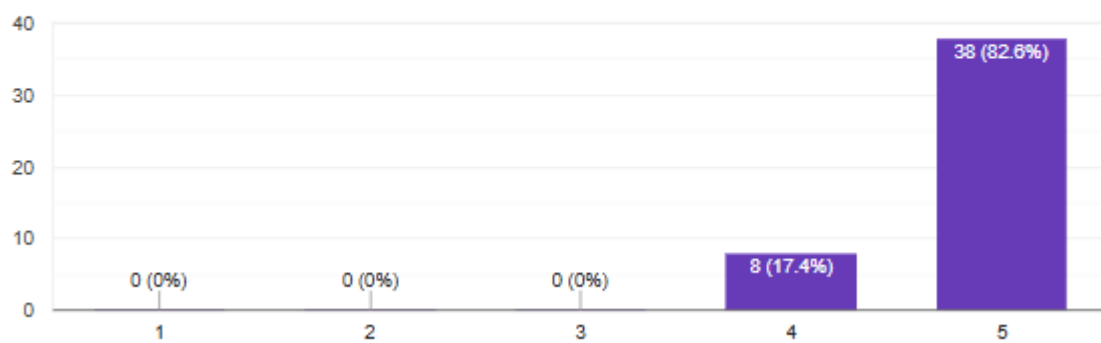
Rate the achievement level in understanding the topics

46 responses



How relevant was the content of the session to your course or academic interests?

46 responses



Faculty Coordinator

Dr. Sukanya N S

HoD-MCA

Dr. Asha V

ATTENDANCE :



NEW HORIZON
COLLEGE OF ENGINEERING
Autonomous College Permanently Affiliated to VTU, Approved by AICTE & UGC
Accredited by NAAC with 'A' Grade, Accredited by NBA

DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS

EXPERT TALK- DESIGNING SCALABLE APPLICATIONS WITH MONGO DB

A.Y. 2024-25

RESOURCE PERSON: Mr. Maddi Abhilash, Senior Software Developer, Anthology Inc., Bangalore

VENUE: MCA B305

DATE: 28-06-2025

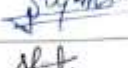
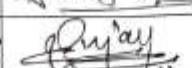
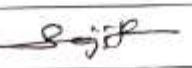
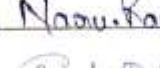
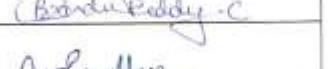
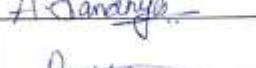
TIME: 10.00 AM to 12:00 PM

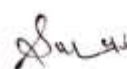
FACULTY COORDINATOR: Dr. N S Sukanya

CONVENOR: Dr. V Asha

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07	Nikitha P → INH24MC090		
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24	INH24MC114	Sakshi Saha	Sakshi
25	INH24MC135	Sumo Patil	Sumo
26	INH24MC139	Swamini D Kalgutkar	Swamini
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29.	INH24MC043	Disha Dey	Disha
30.	INH24MC068	Madhu kumar . K	Madhu
31	INH24MC073	Manoj. G. L	Manoj

32	INH24MC106	Ranjita. Nigale	
33	INH24MC117	Sanketh	
34	INH24MC094	Nikish Kumar	
35	INH24MC138	Suyash Trivedi	
36	INH24MC021	Ashish Kumar	
37	INH24MC025	Ayush Kumar	
38	INH24MC007	Aditya Singh	
39	INH24MC006	Aditya Kumar	
40	INH24MC133	Sujay. M. Mundayi	
41	INH24MC156	Vinay. B. H	
42	INH24MC134	Sujith	
43	INH24MC130	Lupin D	
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45	INH24MC110	Rehni Babu T B	
46	INH24MC077	MONICA B	
47	INH24MC052	K.M. Shreyas	
48	INH24MC051	Jayanth Nair	
49	INH24MC083	Narayan Reddy	
50	INH24MC033	Brindus Reddy C	
51	INH24MC019	Anuguntic Sandhya	
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