



## NEW HORIZON COLLEGE OF ENGINEERING

### Workshop on “Beyond Crud: Real-World MongoDB for Developers”

Organised by  
Department of MCA in association with CSI

**Date:** 09<sup>th</sup> May 2026

**Venue:** MCA Lab

#### **Brief Description of the Event:**

The Department of MCA in association with CSI organised the Workshop on “Beyond CRUD: Real-World MongoDB for Developers.” The primary objective of the workshop was to provide participants with practical knowledge of MongoDB beyond basic CRUD operations, focusing on real-world database development and efficient data handling techniques.

#### **Topics Emphasised:**

- **Introduction to MongoDB and NoSQL Concepts**  
The session began with an introduction to MongoDB and NoSQL databases. Participants understood the differences between relational and document-oriented databases, advantages of MongoDB, collections, documents, and flexible schema design.
- **Overview of MongoDB CRUD Operations**  
Basic CRUD operations, including insert, find, update, and delete operations were demonstrated using practical examples.
- **Schema Design and Data Modeling**  
The workshop explained effective schema design techniques in MongoDB, including embedding and referencing documents. Students learned how to design scalable and optimised database structures for real-world applications.
- **Aggregation Framework**  
The MongoDB Aggregation Framework was introduced to perform advanced data processing and analysis. Participants explored stages such as \$match, \$group, \$project, \$sort, and \$lookup to generate meaningful insights from data.
- **Indexes and Query Optimisation**  
The importance of indexing and query optimisation was discussed to improve

database performance. Students learned how indexes help in faster data retrieval and efficient query execution.

- **Real-World Application Development using MongoDB**

The session demonstrated how MongoDB is integrated into modern web applications for handling dynamic and large-scale data. Practical examples related to inventory systems, user management, and analytics were discussed.

**Outcomes:** By the end of the session, students were able to:

- Gain hands-on experience in performing MongoDB CRUD and aggregation operations.
- Understand schema design strategies and best practices for efficient database management.
- Learn techniques for query optimisation and indexing in MongoDB.

**Activities Conducted:**

- **Case Study and Practical Application:** Participants were involved in performing hands-on MongoDB operations using real-world application scenarios. They worked on collections related to inventory management and user data, implemented CRUD operations, designed schemas, and executed indexing and aggregation queries for efficient data analysis and processing.
- **Q&A and Discussion:** The session addressed participant queries and highlighted the importance of proper schema design, efficient querying, and database optimisation in modern applications. Career opportunities in NoSQL technologies, industry expectations, and best practices for database development were also discussed, making the session both technical and career-oriented.

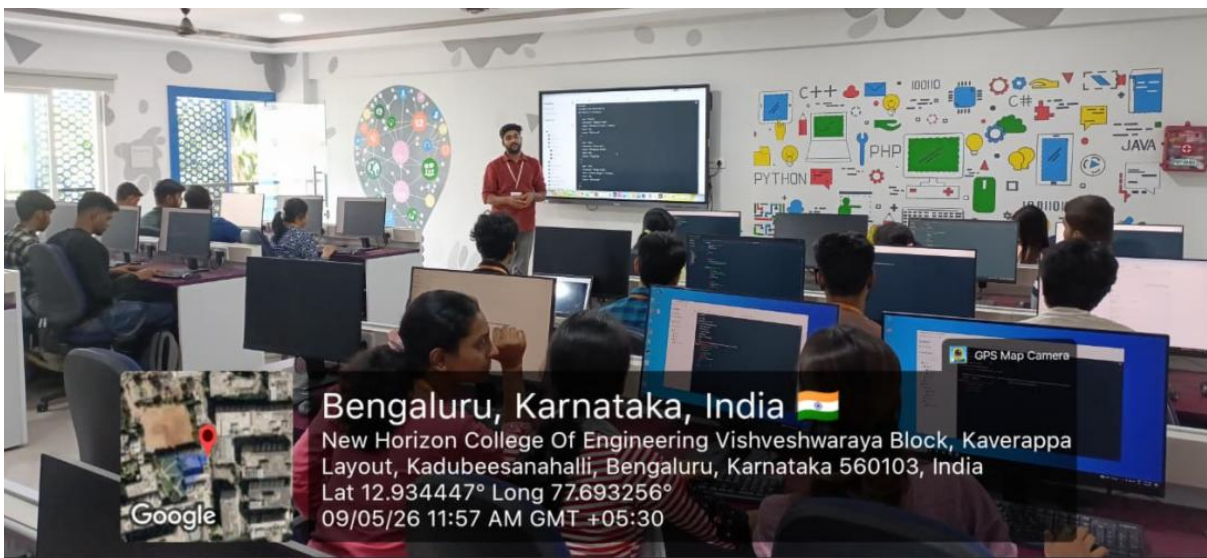
**No of Participants:** 42

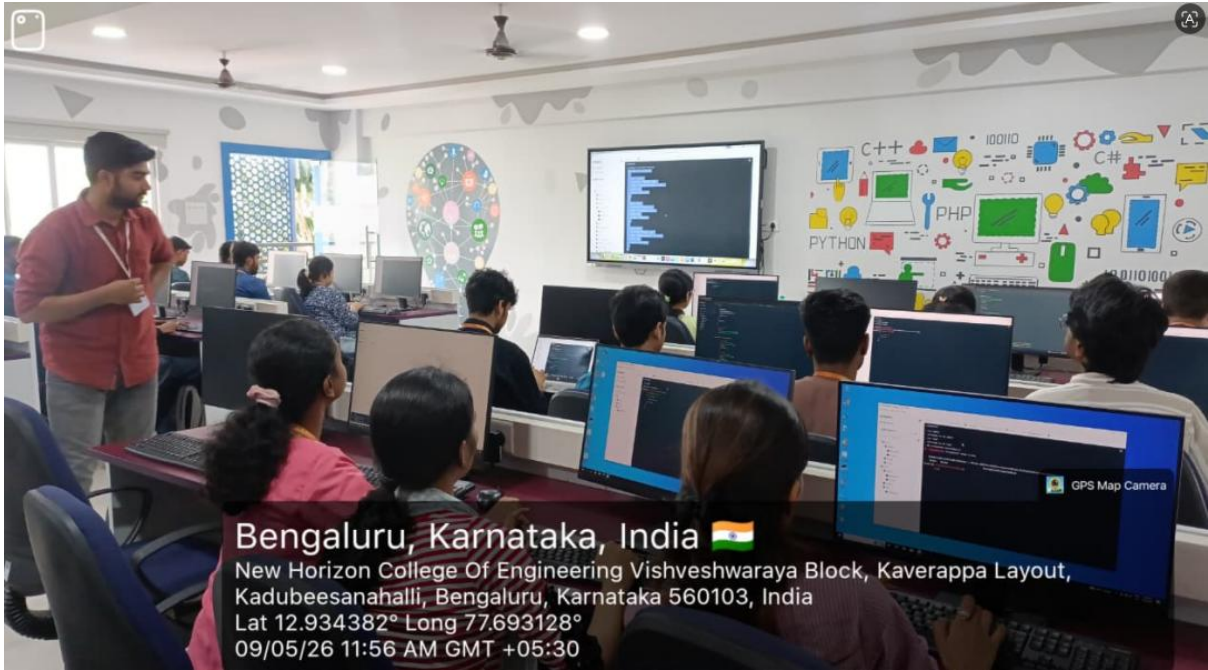
**Winners:** (if any, for activities conducted): NA

**Guest Details:**

Mr. Pavan Kumar V J  
Associate SDE  
Zetwerk, Bengaluru, Karnataka.

## Photographs of the Event





Bengaluru, Karnataka, India 🇮🇳



New Horizon College Of Engineering Vishveshwaraya Block, Kaverappa Layout,  
Kadubeesanahalli, Bengaluru, Karnataka 560103, India  
Lat 12.934382° Long 77.693128°  
09/05/26 11:56 AM GMT +05:30



Bengaluru, Karnataka, India 🇮🇳

New Horizon College Of Engineering Vishveshwaraya Block, Kaverappa Layout,  
Kadubeesanahalli, Bengaluru, Karnataka 560103, India  
Lat 12.934471° Long 77.693229°  
09/05/26 12:39 PM GMT +05:30


Poster:





**Workshop**


# Beyond CRUD


## Real-World MongoDB for Developers

 9<sup>th</sup> May 2026

 09:30 AM - 12:30 PM

 B 208, MCA Department  
Sardar Vallabhbhai Patel Block

 2<sup>nd</sup> Semester MCA Students



**Mr. Pavan Kumar V J**  
Associate SDE  
Zetwerk

Faculty Coordinator  
**Dr. Sukanya N S**  
Associate Professor - MCA

Convenor  
**Dr. V Asha**  
Professor and HoD - MCA

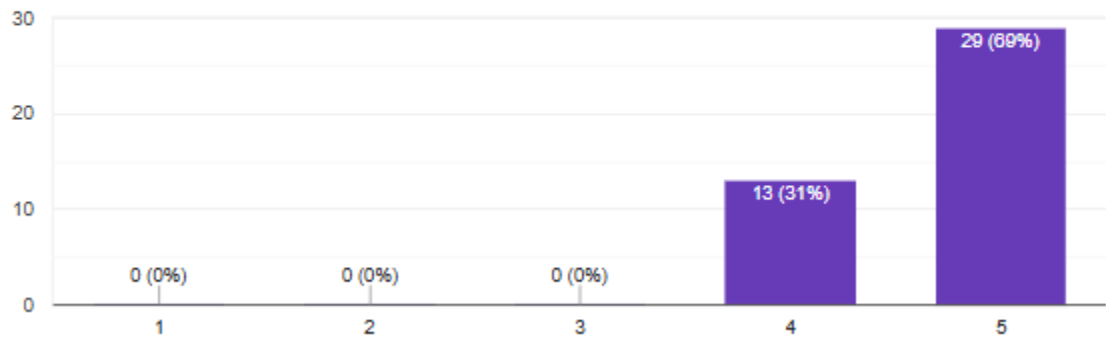
Organised by  
Department of Master of Computer Applications

## Feedback:

### Quality of the training content

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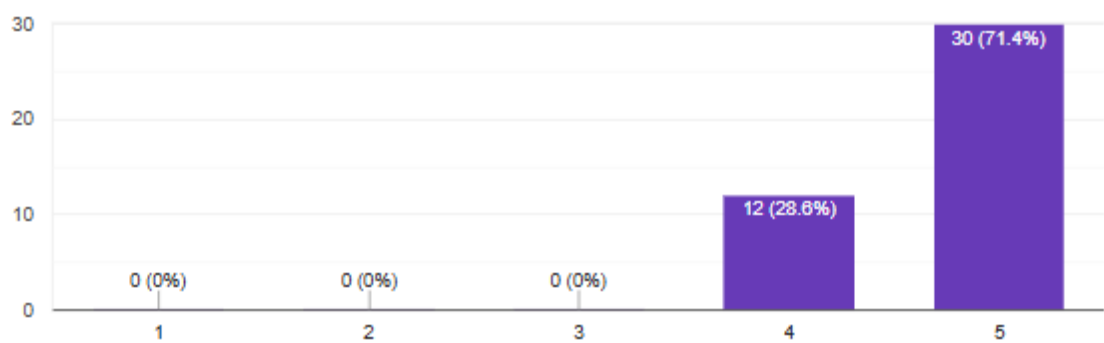
42 responses



### Clarity of the presentation.

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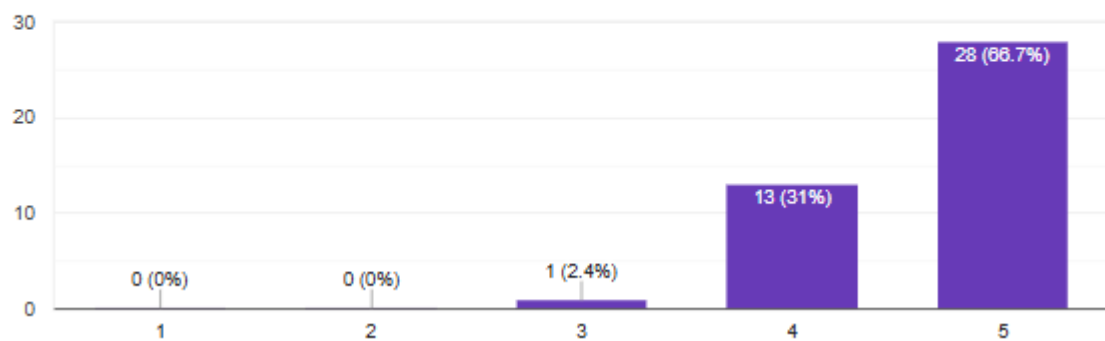
42 responses



### Did the hands-on activities help you understand the concepts better?

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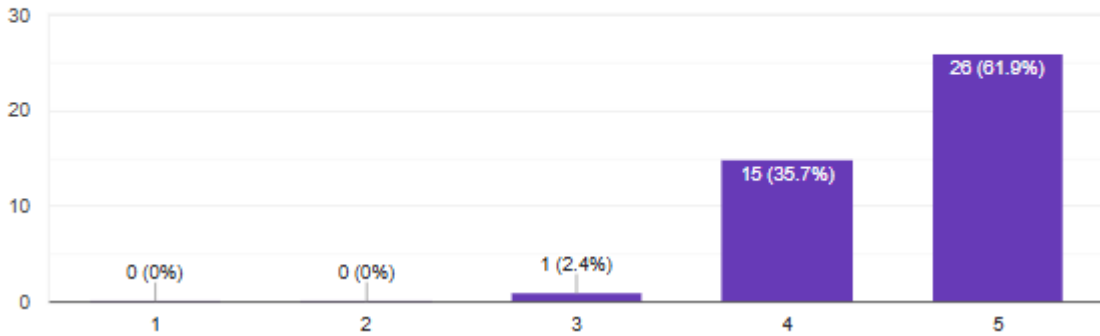
42 responses



Achievement level in understanding the topics

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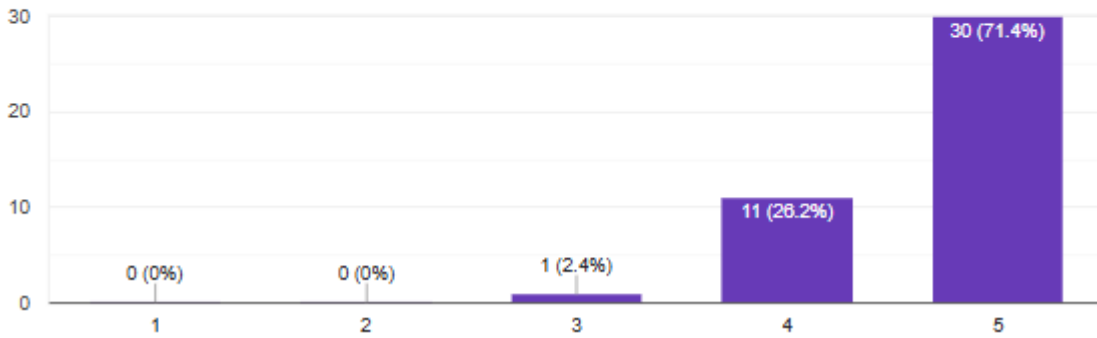
42 responses



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

 Copy chart

42 responses



**Faculty Coordinator**

**Dr. Sukanya N S**



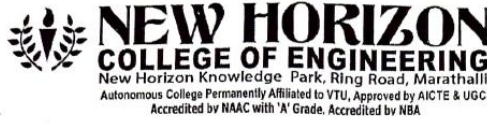
**HoD-MCA**

**Dr. Asha V**

**Attendance:**

WORKSHOP – Beyond CRUD: Real-World MongoDB for Developers

DATED: 09.05.2026



**DEPARTMENT OF MCA**

**AY 2025-26**

**ATTENDANCE SHEET OF PARTICIPANTS**

**WORKSHOP**

Beyond CRUD: Real-World MongoDB for Developers

**RESOURCE PERSON: Mr. Pavan Kumar V J**

Associate SDE

Zetwerk

DATE: 09-05-2026

TIME: 9:30 AM to 12:30 PM

PARTICIPANTS: STUDENTS-SEM II

VENUE: MCA LAB

SERIAL NO	USN NO	NAME	SIGNATURES
1	<del>1NH25MCO28</del>	Chanawar	
2	<del>1NH25MCO27</del>	B. Kalyan	
3	1NH25MCO04	Achyut	
4	1NH24MCO77	MONICA B	
5	1NH25MCO74	mohd shuaib	
6	1NH25MCO73	Muhammad Subib	
7	1NH25MCO102	Preny	
8	1NH25MCO117	RUPAM GIRI	
9	1NH25MCO122	Sanjana. S. C	
10	1NH25MCO135	Shravani	
11	1NH25MCO141	Sheha	

SERIAL NO	USN NO	NAME	SIGNATURES
12.	INH25MC149	Sudeepo.S.V	
13	INH25MC144	Sowabh	
14	INH25MC126	Sankalp Acharya	
15	INH25MC151	Bukumar .K	
16	INH25MC037	Dhruvhi Shree V S	
17	INH25MC031	D Vijayalakshmi	
18	INH25MC041	Farheen M Khan	
19	INH25MC034	Deekshitha .N	
20	INH25MC033	Deekshitha Kumar.S	
21	INH25MC056	Khushi .K.S	
22	INH25MC176	Vishal Kumar	
23	INH25MC017	Ashitha Uk	
24	INH25MC140	Sindhya S	
25	INH25MC082	Nithya .M	
26	INH25MC065	Manasa . S	
27	INH25MC136	shravani .A	
28	INH25MC156	Tansuka . G	
29	INH25MC064	Mahesh S	
30	INH25MC027	Rushi .N	
31	INH25MC142	Sohankumar Mohandas Naik	
32	INH25MC179	Yashwanth M,	
33	INH25MC124	Sanjog. G. Naik	
34	INH25MC116	Rohith . R	
35	INH25MC128	Sanyam Kumar	

