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 MCA

WORKSHOP REPORT

Topic : **Distributed Backend Development using Spring Boot and Apache Spark**

Date : **10th February 2024**

Timing : **9.00 am – 12.30 pm**

Venue : **Department of MCA**

Speaker : **Mr. Ankit Kumar, Associate Software Engineer, Oracle Cerner, Bangalore.**

Coordinator : Dr. B Nithya Ramesh, Associate Professor

Convenor : Dr. V Asha, Professor & Head, Department of MCA

Poster:

Profile of the Expert:

Mr. Ankit Kumar is currently working as Associate Software Engineer at Oracle Cerner, Bengaluru.

He is proficient with hands-on experience in designing, developing, and optimizing microservices-based applications. Proficient in Java EE, Hibernate, and Springboot with a focus on delivering scalable and efficient solutions. Demonstrated expertise in Kubernetes migration and developing Spark jobs.

Objective:

The objective of the workshop is to provide participants with practical insights into building distributed backend systems using Spring Boot and Apache Spark with hands-on practical demonstration for creating a simple web application.

Content:

Introduction to Distributed Backend Development, Overview of Spring Boot, Introduction to Apache Spark, Hands-on Sessions on Setting up a Spring Boot Project, Implementing Distributed Processing with Apache Spark and integrating Spring Boot with Apache Spark are demonstrated during the session.
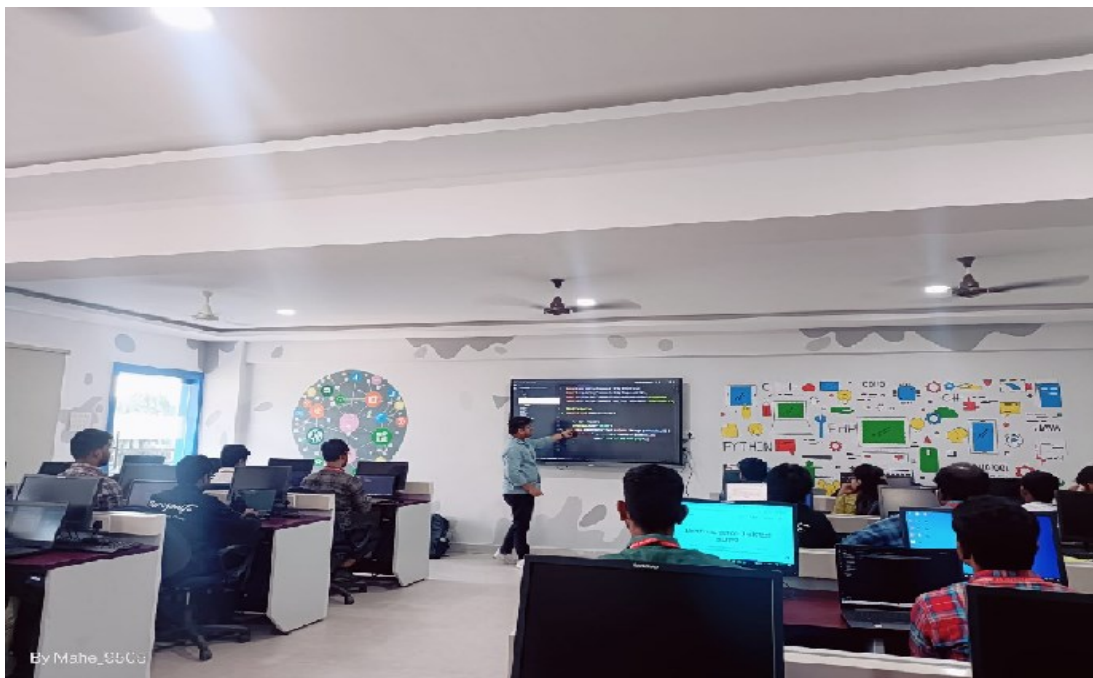
Topics Covered:

The workshop began with an overview of the importance and challenges of distributed backend development. The first hands-on session focused on setting up a basic Spring Boot project. Participants learned about the core concepts of Spring Boot, including dependency injection, configuration management, and building RESTful APIs. Practical exercises involved creating a simple web application. The session continued with a detailed introduction to Apache Spark, covering its architecture, RDDs (Resilient Distributed Datasets),

transformations, and actions. Participants gained a fundamental understanding of how Apache Spark enables distributed data processing.

Participants were able to understand the process of setting up a Spring Boot project. The session focussed on integrating the Spring Boot application with Apache Spark. Practical examples demonstrated how Apache Spark can efficiently process large datasets.

Sample Feedback:

Quality of the training content
14 responses
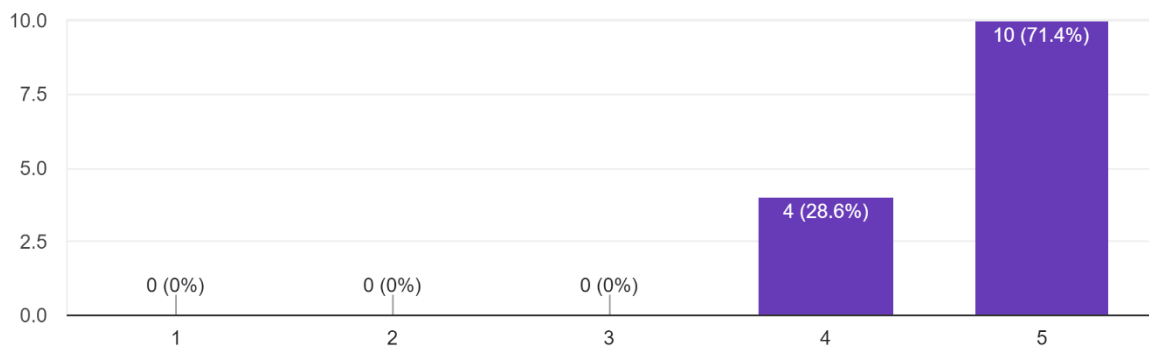
Clarity of the presentation.
14 responses

Effectiveness of the examples depicted during the session.

14 responses

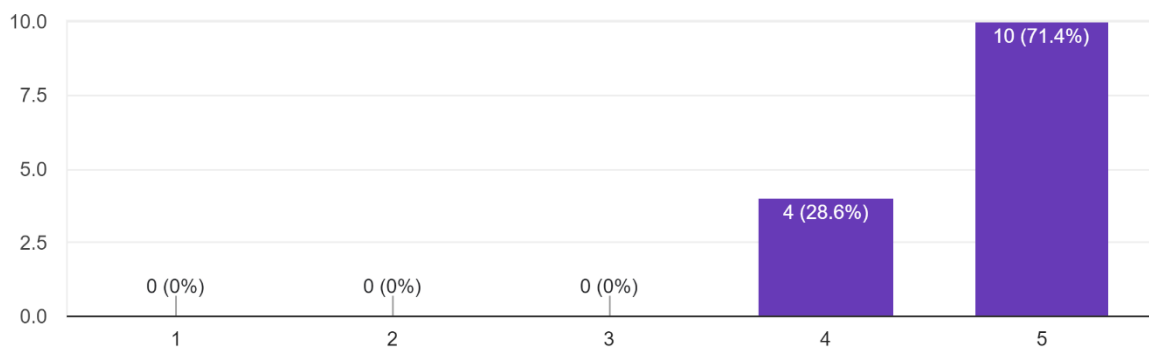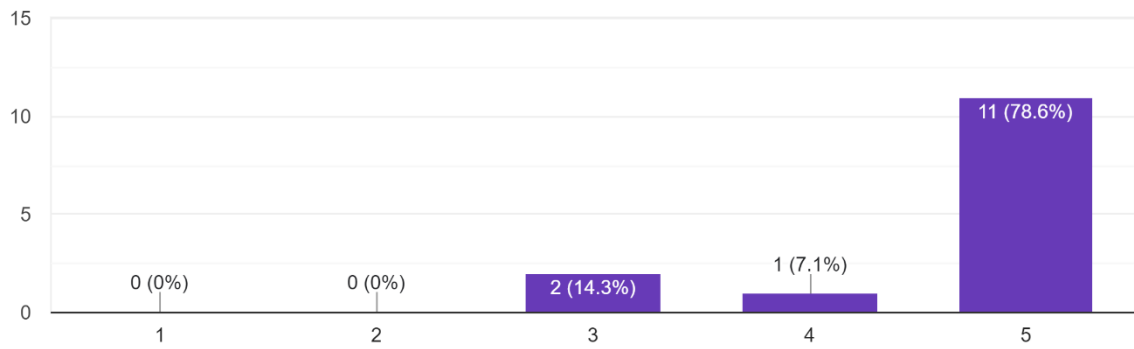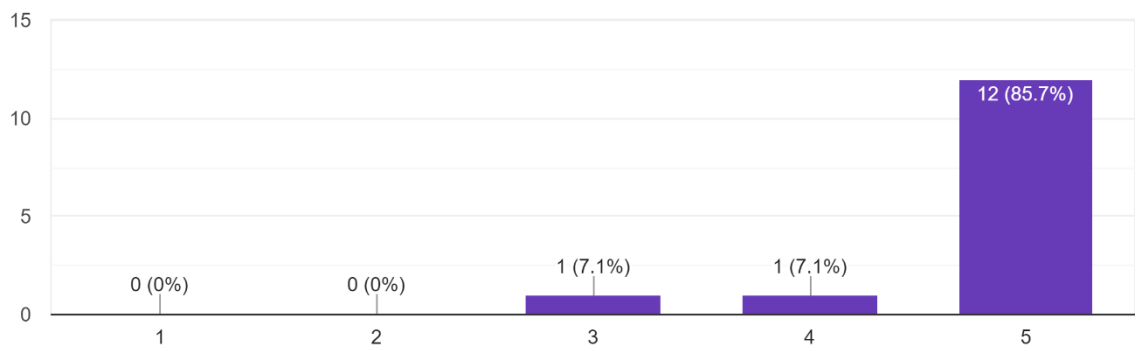## Level of achievements of topics in learning Backend Development.

14 responses

Workshop on Distributed Backend Development using Spring Boot and Apache Spark

Date: 10th February 2024
Attendance

Participants: Semester III – A and B

SL No.	USN	Student Name
1	1NH22MC002	ABHIJIT SEN
2	1NH22MC003	ABHINAV RAJAN
3	1NH22MC006	ADARSHA H M
4	1NH22MC008	AKASH V
5	1NH22MC009	AKASH YADAV
6	1NH22MC010	AMOL A GHORPADE
7	1NH22MC011	AMRUTHA H S
8	1NH22MC012	ANISH RAJ
9	1NH22MC014	ANJALI SIRIGE S
10	1NH22MC015	ANJIMA RAJEEV
11	1NH22MC018	ARIJIT BARAL
12	1NH22MC021	ASHWINI HIREMATH
13	1NH22MC025	BIKRAM BISWAS
14	1NH22MC026	BISWAJEET PAUL
15	1NH22MC028	BRONSON TAKHELLAMBAM
16	1NH22MC030	BRUNDA TM
17	1NH22MC032	CHARANTHEJ REDDY B V
18	1NH22MC033	CHETHAN S G
19	1NH22MC034	CHINTAN S NAIK
20	1NH22MC035	CHIRALA SHANMUKHA SUNDAR
21	1NH22MC039	DIVYA SHARMA
22	1NH22MC040	DIVYABHARATHI T GUDDENNA
23	1NH22MC041	DIVYASHREE S
24	1NH22MC042	G SAI MOULI
25	1NH22MC044	GAJULA SABER HUSSAIN
26	1NH22MC047	HARISH KUMAR P
27	1NH22MC048	HARSHITHA ES
28	1NH22MC049	JAYASURYA R N
29	1NH22MC051	KM SUCHITRA DWIVEDI
30	1NH22MC053	KAIROON P
31	1NH22MC055	KATHYAYINI
32	1NH22MC057	LIKITH GOWDA M
33	1NH22MC058	M MUNI PRASAD
34	1NH22MC059	MADALA DILEEP SAI KUMAR
35	1NH22MC060	MANVANTH L J
36	1NH22MC061	MARUTHEESHA H
37	1NH22MC066	MOHAMMED MAZIL KATINGERI
38	1NH22MC071	NIKHIL T
39	1NH22MC074	OMKAR S KUMBHAR
40	1NH22MC076	PENAGANURI CHAITHANYA
41	1NH22MC077	POOJA
42	1NH22MC078	POOJA B KONDIKOPPA
43	1NH22MC085	PRITY MAJI
44	1NH22MC087	PRIYANKA P IMAGOUDANAVAR
45	1NH22MC090	REHAN GUPTA
46	1NH22MC094	SABA WAKEEL
47	1NH22MC095	SACHIN M MANDAVE
48	1NH22MC101	SHELSIA F
49	1NH22MC103	SHOUVIK GHOSH
50	1NH22MC105	SHRUTI
51	1NH22MC113	TELLAMEKALA THIRUMALA RAO
52	1NH22MC116	TUSHAR M AMASI
53	1NH22MC120	VENNAPUSA VENKATA SREENIVASA REDDY
54	1NH22MC121	VIJAY R GHORPADE

Outcome:

The workshop provided participants with practical knowledge and hands-on experience in building scalable and efficient distributed systems. Students got the opportunity in comprehensive understanding of the integration between Spring Boot and Apache Spark, equipped to apply these skills in real-world scenarios. The workshop received positive feedback for its interactive sessions and valuable content.

Faculty Coordinator   **Head of Department, MCA**

Dr. B Nithya Ramesh   **Dr. Asha V**