माधव प्रौद्योगिकी एवं विज्ञान संस्थान, ग्वालियर
MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR
(Deemed to be University)
NAAC Accredited with A++ Grade
Gola Ka Mandir, Gwalior (M.P.)- 474005, INDIA
Ph.:+91-751-2409300, E-mail: director@mitsgwalior.in, Website: www.mitsgwalior.in

Workshop Report

Date: 25/10/2024

Name of the activity:	**Workshop (Four Days)**
Title of the activity:	**From Classroom to Career: DSA with Java, Taught by Industry Professionals (Pros)**
Brief description of the activity:	**Day-1:** Welcome & Overview: Introduction to Java programming. Java Basics: Data types, variables, operators, and control flow. IDE Setup: Installing and configuring your Java development environment. Session: Array Fundamentals, Introduction to Arrays. Hands-on Practice: Create and manipulate arrays (basic exercises). Day-2: Leet Code Introduction: Overview of the platform and solving strategies. Array Problems 101: Tips and tricks for tackling array-related questions. Group Activity: Discuss solutions and optimization techniques in pairs or small groups. Day-3: Sorting Algorithms: Bubble Sort, Merge Sort, Quick Sort. Searching Algorithms: Binary Search, Linear Search, Advanced Array Techniques. Hands-On Lab: Implement and optimize sorting and searching algorithms. Day-4: Introduction to Strings: String literals, String class, and common methods. String Operations: Concatenation, substring, and immutability. Practice problem-solving with Strings.
Objectives of the activity:	• Gain a comprehensive understanding of Java and explore the fundamentals of arrays. • Utilize your array knowledge to tackle real-world challenges on Leet Code. • Delve into array algorithms to enhance your problem-solving abilities. • Master the key concepts of string handling and manipulation in Java. • Leverage your string manipulation skills to solve complex problems on Leet Code.
Outcomes of the activity:	The participants will be able to: • Build a strong foundation in Java and arrays. • Apply array knowledge to solve real-world problems on Leet Code. • Improve problem-solving skills through key array algorithms. • Master string handling and manipulation in Java. • Solve complex problems on Leet Code using string

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	manipulation techniques.
Mode of Delivery:	Offline
Venue:	Seminar Hall 7
Organized by:	Department of Computer Science and Engineering, MITS(DU) Gwalior
Convener:	Dr. Manish Dixit, Professor & Head
Coordinators:	Dr. Smita Parte, Prof. Mahesh Parmar
Name of the Experts:	**External Experts** 1. Harsh Vardhan Sen & Team of Professionals (Coding Thinker)
Duration:	Four Day
Dates & Time :	**16th October 2024 4:00-6:00 PM** **17th October 2024 2:00-4:00 PM** **18th October 2024 4:00-6:00 PM** **19th October 2024 2:00-4:00 PM**
Participants:	B.Tech 3rd Year students and Faculty members
Number of participants:	138
Level of Activity:	Institute Level
Registration Fee:	**No registration Fee** (In House activity)
Award/Certificate:	Hard Copy of Certificates will be provided

Description of the activity:

Day 1: Introduction to Java Programming, Harsh Vardhan Sen and his team kicked off the workshop by introducing Java programming basics, covering data types, variables, operators, and control flow. Participants set up their development environment and were introduced to arrays, followed by hands-on exercises to practice creating and manipulating arrays.

Day 2: LeetCode and Array Problem Solving, The second day focused on LeetCode, teaching participants how to use the platform and solve problems efficiently. The session covered array-related challenges with tips and tricks for optimization, followed by a group activity where attendees collaborated to discuss solutions and improve their problem-solving techniques.

Day 3: Sorting & Searching Algorithms, Day 3 introduced key sorting algorithms (Bubble Sort, Merge Sort, Quick Sort) and searching techniques (Binary Search, Linear Search). Participants implemented

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these algorithms through hands-on exercises, focusing on optimization and real-world applications in data manipulation.

Day 4: Mastering Strings in Java, The final day of the workshop covered string manipulation in Java, including string literals, the String class, and common methods. Participants practiced string operations like concatenation and substring extraction, applying these skills in problem-solving exercises to enhance their Java expertise.

Attendance:

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Department of CSE

The Department of Computer Science and Engineering (CSE) is organizing a four-day workshop titled "From Classroom to Career: Data Structures and Algorithms (DSA) with Java," taught by industry professionals. The workshop is held on October 16th, 17th, 18th, and 19th, 2024, in Seminar Hall 7. The following students were present during the event.

Sr. No	Enroll. No.	Name of Student	16/10/2024	17/10/2024	18/10/2024	19/10/2024
1	0901CS221004	Aditya kumar	Aditya	Aditya	Aditya	Aditya
2	0901CS221098	Pradhyum Garoshya	प्रद्युम	प्रद्युम	प्रद्युम	प्रद्युम
3	0901CD221049	RAUNAK MANDIL	Raunak	A	A	A
4	0901CD221070	VIDUSHI TIWARI	Vidushi	A	A	A
5	0901CS221143	Utkarsh Pachauri	Utkarsh	Utkarsh	Utkarsh	A
6	0901CS221007	Akash Dixit	Akash Dixit	A	A	A
7	0901CS221006	Akanksha Mishra	AKmishra	Amishra	Amishra	Amishra
8	0901CS221036	Deeksha Sharma	Deeksha	Deeksha	Deeksha	Deeksha
9	0901CS221016	Ankur Sharma	AL	A	AL	AL
10	0901CS221074	Kuldeep Bhadgav	Kuldeep	Kuldeep	Kuldeep	Kuldeep
11	0901CS221066	Khushbu Chacholiya	Khushbu	KB	KB	KB
12	0901CS221034	Ayush Bhoyar	Ayush	Ayush	Ayush	Ayush
13	0901CS201108	Raj Thorani	Thorani	Thorani	Thorani	Thorani
14	0901CS221005	Ajay kumar Gupta	Ajay	Ai	A	A
15	0901CS221109	Rajdeep chaturvedi	R	R	R	R
16	0901CS221033	AJMI SAXENA	A	A	A	A
17	0901CS221079	Mayank Sharma	Mayank	Mayank	Mayank	A
18	0901CS221073	Krishna Sharma	Krishna	Krishna	Krishna	Krishna
19	0901EC221076	Mahalaxmi Prajapati	Mahalaxmi	Mahalaxmi	Mahalaxmi	Mahalaxmi
19	0901CS221096	Piyush Meshram	Piyush	Piyush	Piyush	Piyush
20	0901CS221054	Harshit Sharma	Harshit	Harshit	Harshit	Harshit
21	0901CS221052	Harsh Kushwah	Harsh	Harsh	Harsh	Harsh
22	0901CS221056	Himsagar Rajput	Hims	A	A	A
23	0901CS221028	ARYAN GUPTA	Aryan	A	A	A
24	0901CS221008	Akash k. Thakur	Akash	Akash	Akash	Akash

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Sr. No	Enroll. No.	Name of Student	16/10/2024	17/10/2024	18/10/2024	19/10/2024
25)	0901CS221064	Kartik	Ku	Kartik	Kartik	Kartik
26)	0901CS221093	Nishesh Joshi	Nisha	Rishu	Ash	Disho
27	0901CS221009	Akshat Jain	Akshat Jain	Akshat Jain	Akshat Jain	Akshat Jain
~~28)~~	~~0901CS221003~~	~~Abhijeet~~				
28)	0901CS221003	Abhijeet Sharma	Ab	Ab	Abhijeet	Ab
29)	0901CS221029	Aryay Zulshi	Arya	Ayu	Ayyan	Aryan
30)	0901CS221039	Devansh Rajput	Davansh	Devans	Devansh	Devansh
31)	0901CS221071	Krishna Agrawal	Ail	A	Param	A
32)	0901CS221062	Karan Chhabda	Khan	Param	Karan	Ka
33)	0901CS221026	Arpit Chouhan	A	A	A	A
34)	0901CS221018	Ansh Jain	Anshjain	Anshjain	Anshjain	Anshjain
35)	0901CS221057	Isham Sharma	Isham	Isham	Isham	Isham
36)	0901CS221056	Himsagar Rajput	O	O	O	Param
37)	0901CS221049	Harsh Apreja	Apreja	Apreja	Apreja	Apreja
38	MTCS2401006	Somethya	Somethya	A	A	A
39	MTCS2401005	Poonam	Poliya	A	A	A
40	MTCS2401008	Shruti Jha	Shruti	A	A	A
41	MTCS2401009	Shivani Arya	Shivani	A	A	A
42	MTCS2401002	Jeevani Saxena	Sa	A	A	A
43	MTCS2401011	Surbhi Rajput	Surbhi	A	A	A
44.	MTCS2401004	Nisha Tomar	Nisha	Nisha	Nisha	Nisha
45.	MTCS2401008	Shivani Tomar	Tomar	Tomar	Tomar	Tomar
46	MTCS2401010	Smriti Rathore	Smriti	A	Smriti	Smriti
47.	MTIT2401002	Yash Sharma	Sharma	Ayush	Ayush	A
48.	0901CS233D05	Ayush Tripathi	Ayush	Ayush	Ayush	Ayush
49	0901CD221016	Atulay Chourciya	Atulay	A	A	A
50	0901AT231049	Raj Singh		A	A	A
51	0901CD221071	Vishal goswami	VG	A	A	A
52	0901CD221068	Vaishnavi Katare	Vaishh	A	A	A
53	0901CD221038	mattesh	m	A	A	A
54.	0901CS221135	Surendra Ahirwar	Surendra	Surendra	Surendra	Surendra
55.	0901CD221062	Tanish Uchariya	Tanish	Tanish	Tanish	Tanish
56.	0901CS233D01	Abhishek	Abhosh	Abhish	Abhish	
57	0901CD221010	Ankit thePe	Ankit	A	A	A
58	0901CD221045	Priyanshi	Priyan	A	A	A

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59	0901CS221011	Aman Goyal	Amanj	Amanj	Amanj	Amanj
60	0901CS221040	Devendra Patidar	tendra	Jevendra	tendra	tendra
61	0901CS221152	Yashraj Stonke	yash.	very	A	Cigyf
62	0901CS221037	Deepak	Dupak	DeePak	Dupak	Dupak
63	0901CS2210B	Aniket Dhurvey	Aniket	Aniket	Aniket	Aniket
64	09CS221406	Rahul Salanki	Rsalanki	Rsdanki	Rsalanki	Rsalanki
65	0901CS221060	Jay deep Chouhan	Chauhan	Chauhan	Chauhan	Chauhan
66	0901CS221055	Harshraj Dawar	Harshraj	Harshraj	Harshraj	Harshraj
67	0901CS221041	Abhay choksliya	Abhy	Ybly	Ybly	Ably
68	0901CS221123	Satish kumar dhurve	Sky	Sky	Sam	Parvl
69	0901CS221116	Pryal Tavoli	Parul	Parul	Parol	Parol
70	0901CS221134	Suraj Singh Sikaua	suraj	suraj	suraj	suraj
71	0901CS221105	Rahul Shah	Rahul	Rahul	Rahul	Rahul
72	0901CS221113	Riddhi Sharma	Riddhi	Riddhi	Riddhi	Riddhi
73	0901CD221056	Sandeep Yadav	Rey	A	A	A
74	0901CS221099	Pranav Sunu	I	I	I	I
75	0901CS221145	Vaishnavi More	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi
76	0901CS221112	Renuka Wartad	Renuka	Renuka	Renuka	Renuka
77	0901CS221129	Shruti Rana	Shruti	Shruti	Shruti	Shruti
78	0901CS221121	Sambhav Jain	Sjain	Sjain	Sjain	Sjain
79	0901CS221174	Lovejeet Singh	Lsingh	Lsingh	Lsingh	Lsingh
80	0901CS221142	Utkarsh Nagar	Utkarsh	utkarsh	Utkarsh	A
81	0901CP221018	Ayush S. Rajput	Ayush P.	A	A	Ayush
82	0901CS221088	Niharika Pachori	Pachori	Pachori	Pachori	Pachori
83	0901CS221148	Vinayak Shrivasta	Vinayak	vinayak	Vinayak	Vinayak
84	0901CS221053	Harshit kumar	Harshit	Harshit	Harshit	Harshit
85	0901CS221086	Neha rani	Neha	Neha	Neha	Neha
86	0901CS221068	Khushi Dhakad	Khushi	Khushi	Khushi	Khushi
87	0901CS221151	Yashika verma	Yashika	Yashika	A	A
88	0901CS221087	Nidhi Tiwari	Nidhi	A	A	A
89	0901CS221014	Anjali Parihar	Anjali	A	Anju	A
90	0901CS221017	Anmol Patwa	Anmol	A	A	A
91	0901CS221002	Abhidha Joshi	Abhidha	Joshi	Joshi	A
92	0901CD221023	Devesh Singh	Dev	Dev	Dev	A
93	0901CD221057	Santosh kumar	Santosh	Santosh	Santosh	A
94	0901CS221156	Yugal Burde	Burde	Burde	Burde	Burde
95	0901CS221158	Kartik Indurkar	Kartik	Kartik	Kartik	Kartik
96	0901CS221101	Pratham Sharma	Prath	Prath	Prath	Prath
97	0901CS221023	Anuraj Singh Kushwah	Anuraj	Anuraj	Anuraj	Anuraj
98	0901CS221110	Ravi Raj	Ravi	Ravi	Ravi	Ravi

volunteer

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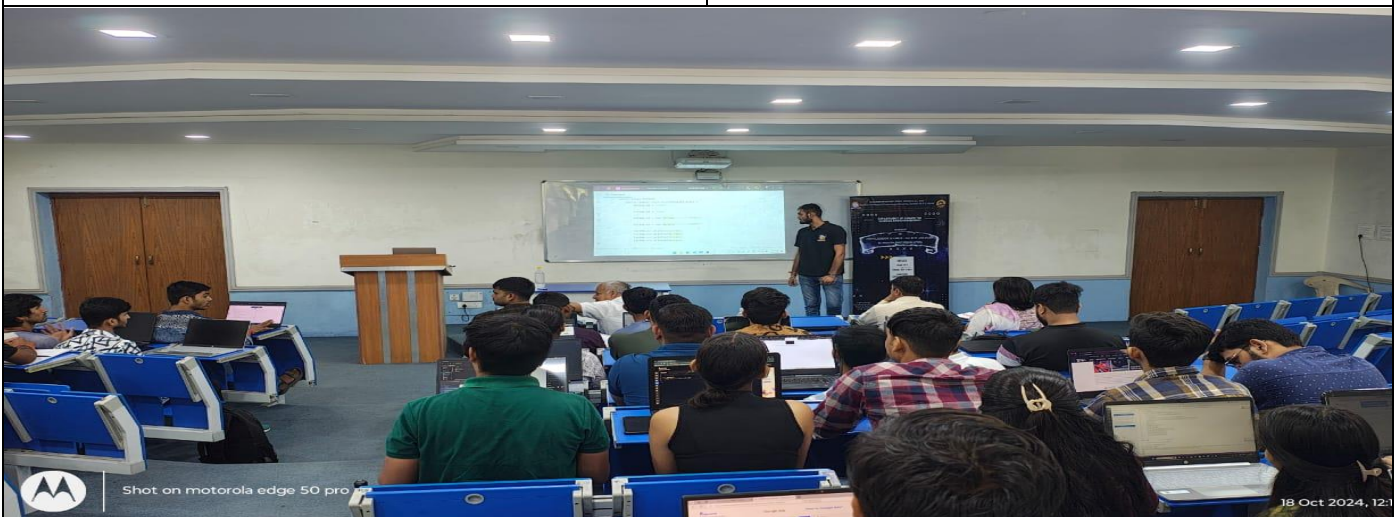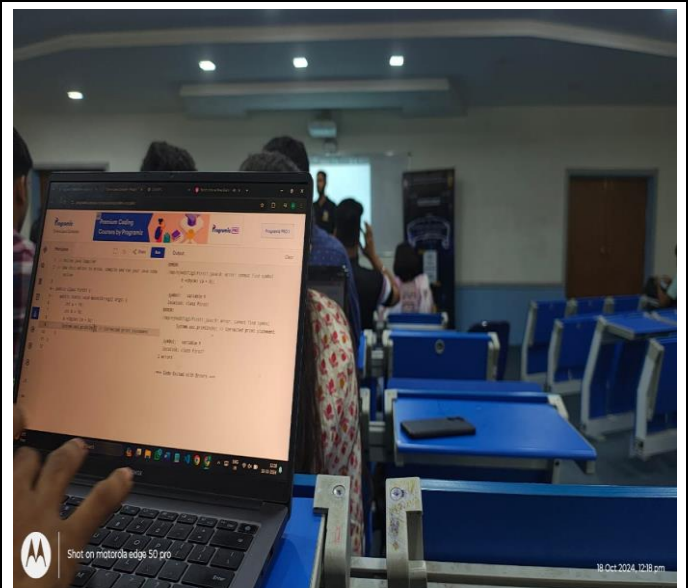Ph.:+91-751-2409300, E-mail: director@mitsgwalior.in, Website: www.mitsgwalior.in

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94	0901CD271072	Vishal Rawat	Vishal Rawat	Vishwosiaunt	A	A
95	0901CD221066	Uday Shakya	Cder	A	A	A
96	0901CS221050	Harsh Jain	Harsh	Harsh	A	A
97	0901CS233D08	Lokendra Sharma	Sharma	Sharma	Filma	Sharre
98	0901CS233D03	Amul agrawal	A	A	A	A
99	0901ML233001	Ankit Rajput	Ankit Raj	A	A	Mugfong
100	0901CS233D07	Harshit varshney	H	H	H	
101	0901CS221139	Tanmay Sawankus	Tanmay	Tanmay	Sawanq	Tanmy
102	0901CD221129	Jai Kesh Kain	Kain	A	A	A
103	Lt-Entry	Devanshu Khal	Tanku	A		Chirollya
104	0901CS221140	Uday Chiroliya	Chiroliya	Chiroliya	Chiroliya	Chiroliya
105	0901CS221138	Surya Pratap Singh	Surya	Surya	Surya	Surya
106	0901ET221632	Khushboo Tagore	Khushboo	Khushboo	Khushboo	Khushboo
107	0901CS233D11	Shreya Glawr	Shreya	Shreya	Shreya	Shreya
108	0901CS233D10	Palak Jiyil	Palak	Palak	Palak	Palak
109	0901CS233D09	Lokesh ganotiya	Lukesh	Lukesh	Lukesh	Lukesh
110	0901CS233D06	Gourisha Rathore	G. Rathore	Rathore	G. Rathore	G. Rathore
111	0901CD221051	Ritesh singh	Ritesh	Ritesh	Ritesh	Ritesh
112	0901CD221023	Devesh singh	Devesh	A	A	A
112	0901CS243068	Prashant Suman	P Suman	P Suman	P Suman	P Suman
113	0901CD221077	Yogesh Prajapati	yogesh	yogesh	yogesh	Yogesh
114	0901CS221153	Yashvardhan S Jadon	Jadon	Jadon	Jadon	Jadon
115	0901CS221132	Suhani Mehra	Suha	Suha	Suha	Suha
116	0901CS221118	Rudraksh Shukla	rudraksh	Rudraksh	A	A
117	0901CS233D12	Vishal Kumar gadiya	Vishal	Vishal	A	A
118	0901CS221078	Mayank Purohit	Mayank	Mayank	A	A
119	0901CS221070	Kolluru Shreya	Shreya	Shreya	Shreya	A
120	0901CS221077	Maitri Gupta		Maitri G	A	A
121	0901CS221117	Rohan Soni	Rohan	Rohan	Rohan	Rohan
122	0901CS221114	Kishath Sharma	Rishab	Rishab	Rishab	Rishab
123	0901CS221063	Karan Singh Baran	Kar	Karan	Karan	A
128	0901CS221058	ISHAN SOHANI	Ishan	Ishan	Ishan	A
125	0901CS221111	Sumit	Sumit	Sumit	A	A
130	0901CS221157	Abhisekh Agrawal	Abhishe	Abhish	A	A
131	0901IT221049	Nirbhay Partap Singh	N	Nirbh	N	Abhi
132	0901ET221005	Aditi Gupta	Aditi	Aditi	Aditi	Aditi
133	0901EC221118	Shubham Sahu	Shubham	Shubham	Shubham	Shubham
134	0901EC221134	Tanish Pali	Pali	Pali	Vishal	Vishal
135	0901CS233D12	Vishal Kumar gudia	Vishal	Vishal	Vishal	Vishal
136	0901CS221147	Vijay Prajapati	vijay	vijay	vijay	vijay
137	0901CS221027	Aryan baur				
138	0901ME231073	Rishabh Gautam	R.gautam	R.gautam	R.gautam	R.gautam

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Feedback:

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How would you rate the overall quality of the lecture content?

37 responses

- Excellent
- Good
- Average
- Poor

43.2%

56.8%
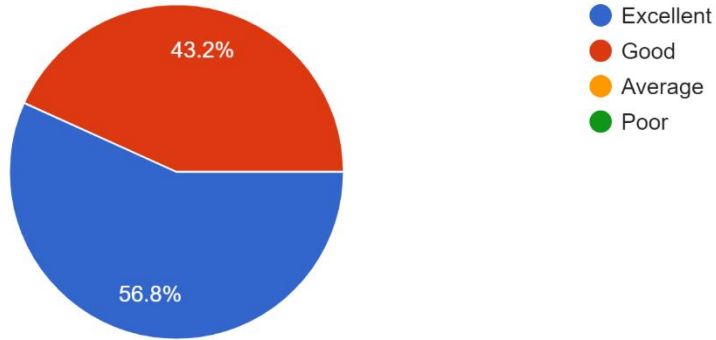
How clearly did the speaker explain the topics?

37 responses

- Very clear
- Clear
- Somewhat clear
- Not clear

40.5%

59.5%

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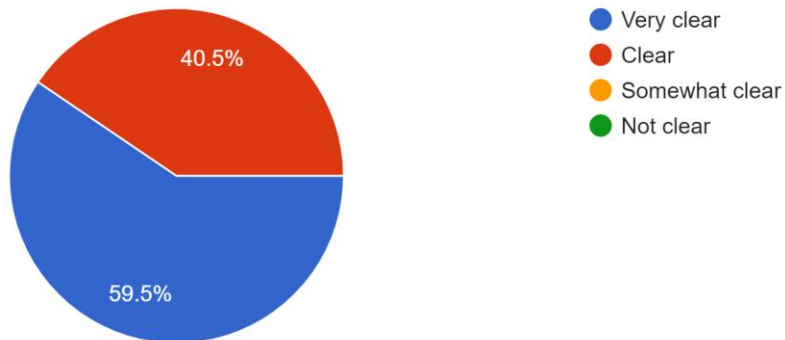
Did the speaker encourage interaction and participation?
37 responses
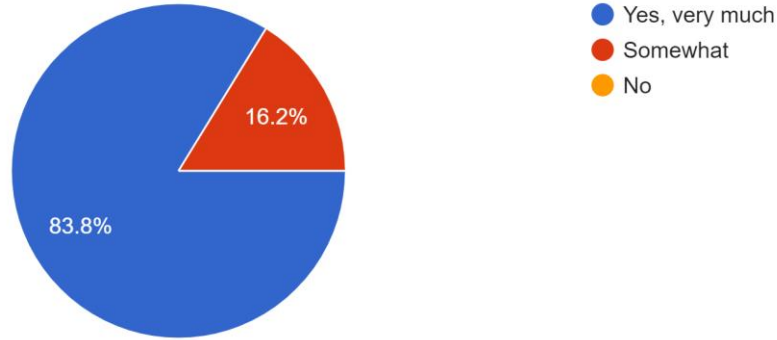
- Yes, very much
- Somewhat
- No

16.2%
83.8%

How would you rate the overall quality of the lecture content?
37 responses

- Excellent
- Good
- Average
- Poor

51.4%
43.2%

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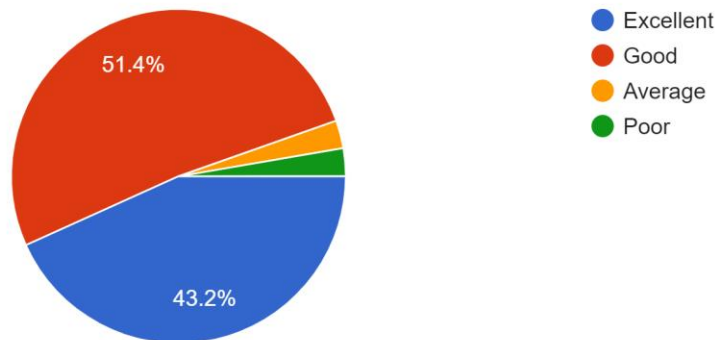
Any additional comments regarding the sessions or overall agenda?

14 responses

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"The Empowering Coding Excellence workshop organized by the Department of Computer Science and engineering, aims to ignite a legacy of innovation and expertise in Data Structures and Algorithms (DSA) with Java. Led by seasoned industry professionals, this comprehensive workshop will equip participants with the skills to tackle complex coding challenges and harness the power of Java. Through interactive sessions, hands-on exercises, and real-world applications, participants will develop a profound understanding of DSA concepts and their industry relevance. As we strive for coding excellence, we honor the spirit of determination and perseverance that defines our nation's progress. Joinus in this transformative journey, where technology meets passion, and innovation knows no bounds.

Let's code a brighter future, fueled by knowledge, creativity, and the unwavering pursuit of excellence."

Prof. Mahesh Parmar
(Workshop Coordinator)

Dr. Smita Parte
(Workshop Coordinator)

Dr. Manish Dixit
(Prof. & Head)