



माधव प्रौद्योगिकी एवं विज्ञान संस्थान, ग्वालियर  
MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR  
Deemed University  
(Declared under Distinct Category by Ministry of Education, Government of India)  
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MITIS

## Department of Computer Science & Engineering

Date: 9/10/24

### Workshop Report: "Building Blocks of IoT for Developing Microprojects"

The Department of Computer Science and Engineering, in collaboration with the IEEE Student Chapter, IEEE Computer Society, and the Innovation and DIY Club Gwalior, organized a workshop titled "Building Blocks of IoT for Developing Microprojects" on 28th September 2024 and 2nd October 2024. The workshop was specifically designed for 1st-year students from the departments of CSE, IT, AI, and Electronics.

The workshop aimed to provide a foundational understanding of the Internet of Things (IoT) and its applications. Participants were guided through practical sessions to help them develop microprojects based on IoT technologies. The sessions focused on enhancing the technical skills of students. Promoting a culture of innovation and creativity through the use of IoT in developing microprojects using Arduino.

Students gained a practical understanding of IoT concepts, which will serve as a foundation for future projects and coursework. Participants developed critical hands-on skills in Arduino. The collaborative nature of the workshop fostered teamwork and creative problem-solving. Many students expressed interest in pursuing further learning in IoT, with some planning to extend their microprojects into more complex systems.

The workshop was a resounding success, with enthusiastic participation and positive feedback from the students, providing them with the foundational skills necessary for IoT project development.

Dr. Devesh Kumar Lal  
Assistant Professor  
CSE

Dr. Gagandeep Kaur  
Assistant Professor  
CSE

Dr. Manish Dixit  
Prof and Head  
CSE

## ANNEXURE-I

# GLIMPSE OF THE ACTIVITY BASED LEARNING WEB TECHNOLOGIES





 GPS Map Camera



Google

Gwalior, Madhya Pradesh, India  
66J4+74V, Mela Ground, Thatipur, Gwalior, Madhya Pradesh 474011, India  
Lat 26.230658°  
Long 78.205092°  
02/10/24 11:09 AM GMT +05:30



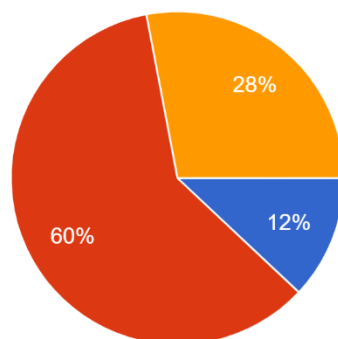


## ANNEXURE-II

### STUDENTS FEEDBACK

ARE YOU A CLUB MEMBER?

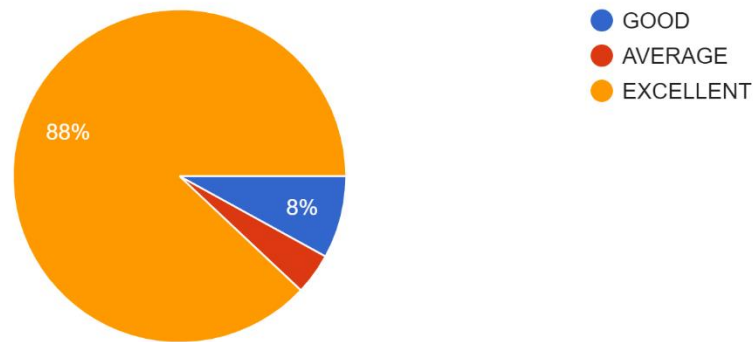
50 responses



- YES
- NO
- Want To be a member

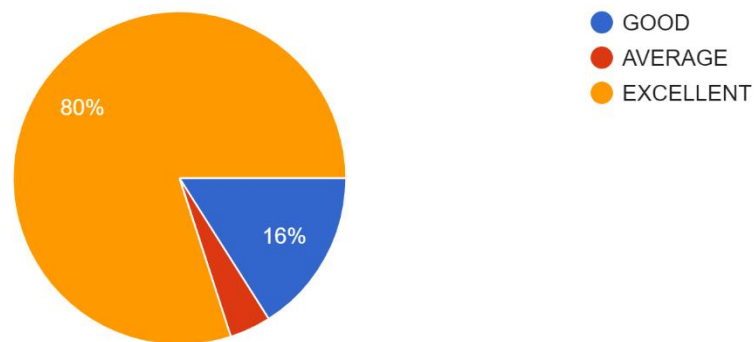
how would you rate the workshop content?

50 responses



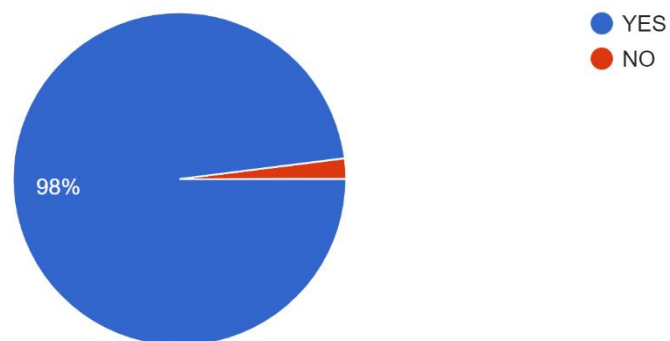
How would you rate the instructor's knowledge and expertise?

50 responses



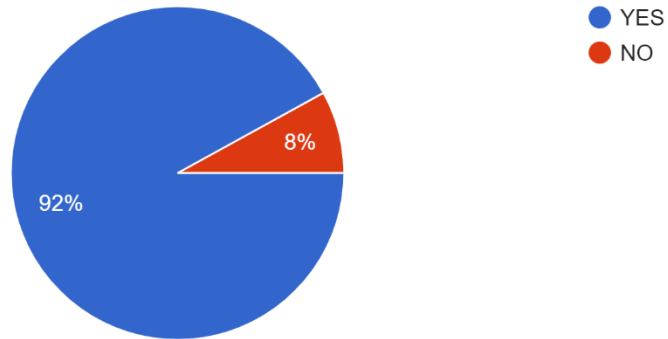
Were the topics covered in the workshop relevant to your interests?

50 responses



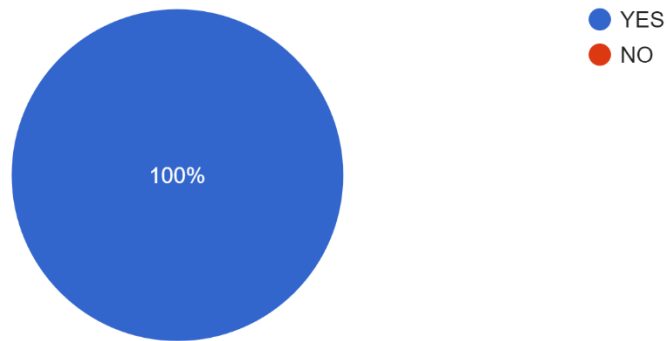
Did you feel adequately prepared to complete the workshop projects?

50 responses



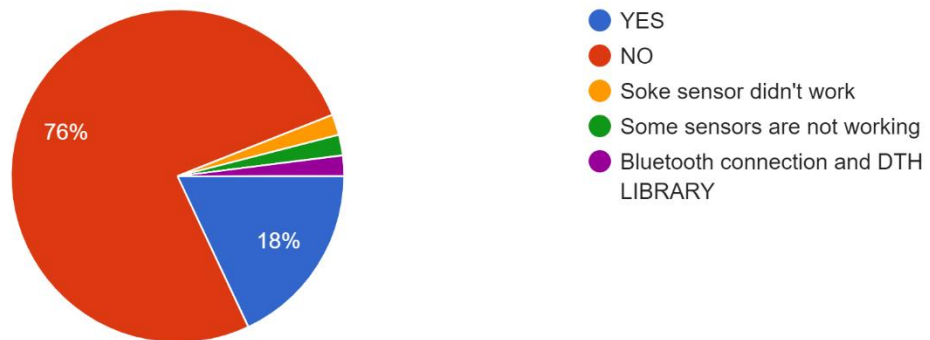
Were the workshop materials (e.g., handouts, kits) helpful?

50 responses



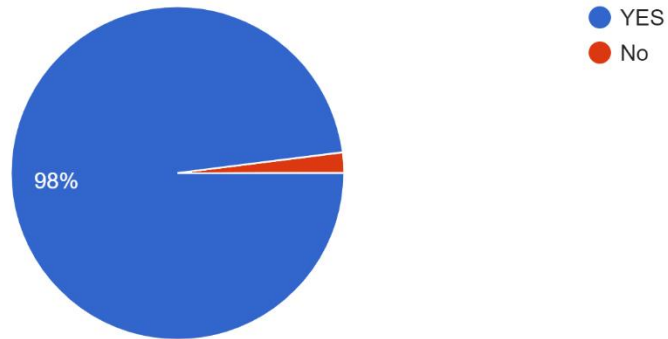
Did you have any technical difficulties during the workshop?

50 responses



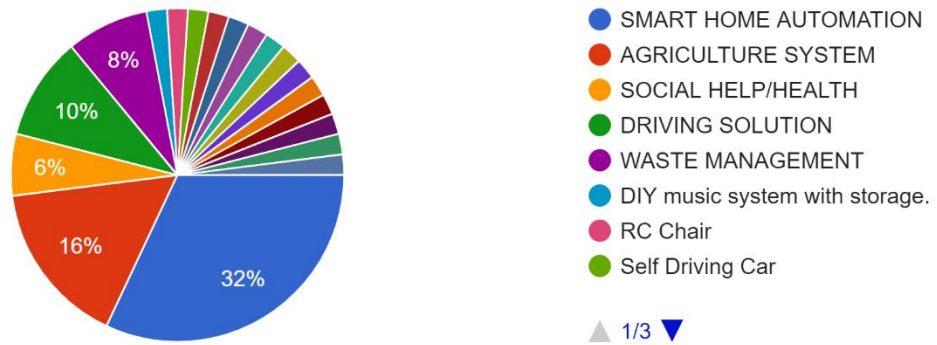
Would you recommend this workshop to others?

50 responses



WHICH TYPE OF PROJECTS YOU WANT TO DO FURTHER?

50 responses



**ANNEXURE -III**



(Attendance) 1st Year "DOT" Micro-Projects Workshop

S. No	Name	Enrollment No	Signatures
1.	Rudra Pratap Singh Parmar	24 am 10 su 55 @mitgwal.ac.in	<u>R. Prats</u>
2.	Vansh Pratap Singh Jadon	24 CS 10 va 145	<u>V. Jadon</u>
3.	Mohit Sharma	24 CS 10 mo 80	<u>Mohit</u>
4.	Prathmesh Chorghade	24 HC 10 ph 100	<u>Prathmesh</u>
5.	Sankalp Shrivastava	24 MC 10 sa 117	<u>Sankalp</u>
6.	Sachin Kumar	24 CS 10 Sa 112	<u>Sachin Ku.</u>
7.	Piyush Gautam	24 CS 10 Pi 91	<u>Piyush</u>
8.	Ashish Dohare	<del>24 AD</del> BTAD 2401018	<u>Ashish</u>
9.	Nagendra Singh Sikarwar	BTET 2401079	<u>Nag</u>
10.	Medhavi Agrawal	BTET 2401075	<u>Medhavi Agrawal</u>
11.	Harsh Raj	BTET 2401059	<u>Harsh</u>
12.	Alok Kumar Kushwah	24 CS 10 al 18	<u>Alok</u>
13.	ARYAN CHOUHAN	BTET 2401033	<u>Aryan</u>
14.	Anurag Singh Jadon	BTET 2401030	<u>Anurag</u>
15.	Aditya Raj Sahu	BTET 2401006	<u>Aditya</u>
16.	Disha Chopra	BTCD 2401023	<u>Disha</u>
17.	Prasun Singh	BTCD 2401047	<u>Prasun</u>
18.	Bhumika Sengar	0901A1231021	<u>Bhumika</u>
19.	Arjun Parihar	24 CS 20 ar 29	<u>Arjun</u>
20.	Rajshi Suryawanshi	BTCS 2401105	<u>Rajshi</u>
21.	Riya Barmajia	BTCS 2401102	<u>Riya</u>
22.	Vanshika Wamankar	BTCS 2401146	<u>Vanshika</u>
23.	Rishi Rajwade	BTCS 2401107	<u>Rishi</u>
24.	Aaryanvi Sharma	BTCS 2401002	<u>Aaryanvi</u>
25.	Aditi Gupta	BT HC 2401011	<u>Aditi G</u>
26.	Harshita	BTCS 2401057	<u>Harshita</u>

S.No	Name	Enrollment no	Signatures
(27)	Abhay Vesimga	0901EE231003	<u>Abhay</u>
(28)	Adarsh Goyal	0901EE231008	<u>Adarsh</u>
(29)	Rohit Arora	24CS1020109	<u>Rohit</u>
(30)	Sandeep	24CS1050118	<u>Sandeep</u>
(31)	Krishna Agrawal	BTET2401067	<u>Krishna</u>
(32)	Ayush Sute	BTME2401023	<u>Ayush</u>
(33)	Aditya Chandel	BTCS2401010	<u>Aditya</u>
(34)	Sumit Kushwah	<del>BTME234010073</del> BTME2401073	<u>Sumit</u>
(35)	Anand Raj Tripathi	BTET2401020	<u>Anand</u>
(36)	EKAGRA GANGIL	BTCS2401047	<u>EKAGRA</u>
(37)	Ashwin Patel	0901ET231015	<u>Ashwin</u>
38	Abhishek Gupta	BTCS2401004	<u>Abhishek</u>

### SLOT 2 (ATTENDANCE)

39	MUSKAN CHOPRA	BTCD2401038	<u>Muskan</u>
40	Pooja	BTAI2401049	<u>Pooja</u>
41	Shivani Paghwanani	BTCS2401124	<u>Shivani</u>
42	Muskan Solanki	BTCS2401081	<u>Muskan</u>
43	Taher Ujain	BTET2401137	<u>Taher</u>
44	Vikas Shinkare	BTET2401147	<u>Vikas</u>
45	Pratik Dubey	BTET2401118	<u>Pratik</u>
46	Anas Khom Gopal	BTCS2401023	<u>Anas</u>
47	Arpit Sharma	BTET2401031	<u>Arpit</u>

S NO	Name	Enrollment No	Signatures
48	KUNAL YADUVANSHI	BTCS 2401074	<u>Kunal</u>
49	Hemant Singh	BTCB 2401031	<u>Hemant</u>
50	Vedant Chahalote	BTMC 2401146	<u>Vedant</u>
51	Anmol Chouksey	BTAM 2401011	<u>Anmol</u>
52	Rishabh TriPathi	BTAM 2401054	<u>Rishabh TriPathi</u>
53	Aditya Gupta	BTAM 2401003	<u>A Gupta</u>
54	Adi Kumar Jain	BTCS 2401008	<u>A Jain</u>
55	AKshat Bansal	BTEL 2401016	<u>A</u>
56	Moidul Malvi	0901AI231037	<u>M Malvi</u>
57	Neeraj Ojha	0901AI231040	<u>N Ojha</u>
58	Brahm Prakash Singh Tomar	BTME 2401025	<u>Bom</u>
59	Aryan Parihar	24CS10 ar 29	<u>Ayan</u>
60	Prakhar Nema	BTCS 2401095	<u>P Nema</u>
61	Tejas Dhandhru	BTEE 2401082	<u>Tejas</u>
62	Sourav Shrivastava	BTCS 24010133	<u>Sourav</u>



## IOT Foundation Workshop Attendance Sheet

S. No.	Team No.	Student Name	Enrollment	Supplies	
1	1	Mohit sharma	BTCS2401080	Arduino ✓ LED ✓	Received Soni
2		Sachin Kumar	BTCS24010112	Ultrasonic ✓ Servo ✓	
3		Kshiti Soni	BTCS2401073	Bluetooth Dht11	
4				USB Cable ✓	
5	2	Pushpendra Shrivastava	BTCS2401101	Arduino ✓ LED ✓	Received Thy
6		Rahul Yadav	BTCS2401103	Ultrasonic ✓ Servo ✓	
7		Om Grandhawane	BTCS2401087	Bluetooth Dht11	
8		Khushi gupta	<del>BTCS2401075</del>	USB Cable ✓	
9	3	Khushi Bansal	BTCS2401070	Arduino ✓ LED ✓	Received Kumar
10		Khushi Garg	BTCS2401071	Ultrasonic ✓ Servo ✓	
11		Khushi Gupta	BTCS2401075	Bluetooth Dht11	
12				USB Cable ✓	
13	4	AKanksha Sharma	BTCS2401015	Arduino ✓ LED ✓	Received Yadav
14		Kanika Jain	BTCS2401067	Ultrasonic ✓ Servo ✓	
15		Unnati Jain	BTCS2401070	Bluetooth Dht11	
16				USB Cable ✓	
17	5	Liyush Sharma	BTCS2401092	Arduino ✓ LED ✓	Received Liyush
18		Rasool Singh Narwanji	BTCS2401106	Ultrasonic ✓ Servo ✓	
19		Amit Rathore	BTET2401019	Bluetooth Dht11	
20				USB Cable ✓	



## IOT Foundation Workshop Attendance Sheet

S. No.	Team No.	Student Name	Enrollment	Supplies
21	6	Yuvraj Singh Narwariya	BTC S2401154	Arduino ✓ LED ✓ Ultrasonic ✓
22		Ankit Karwariya	BTC S2401025	Servo ✓ Bluetooth ✓
23		Aman	BTC S2401029	Dht11 ✓ USB Cable ✓
24	7	Kaushik Sikanwar	BTAM2401022	Arduino ✓ LED ✓ Ultrasonic ✓
25		Mahi Gupta	BTC S2401077	Servo ✓ Bluetooth ✓
26		Shreya Goyal	BTC S240127	Dht11 ✓ USB Cable ✓
27		Sneha Tomar	BTC S2401132	
28				
29	8	Prityamshi Maheshwari	BTC S2401098	Arduino ✓ LED ✓ Ultrasonic ✓
30		Amishi Ka Dixit	BTEL2401025	Servo ✓ Bluetooth ✓
31		Naina Pandey	090110221005	Dht11 ✓ USB Cable ✓
32		Radhyum Garashya	0901CS221098	
33	9	BAL KISHAN KUSHWAH	0901EE233003	Arduino ✓ LED ✓ Ultrasonic ✓
34		Aditya Duley	BTC S2401022	Servo ✓ Bluetooth ✓
35		Abhishek Kumar	BTC S2401005	Dht11 ✓ USB Cable ✓
36				
37	10	Aalok Patel	090110221001	Arduino ✓ LED ✓ Ultrasonic ✓
38		Alkshat Gupta	0901EE231017	Servo ✓ Bluetooth ✓
39		Arpit Agrawal	0901EE231029	Dht11 ✓ USB Cable ✓
40		HARISH RAJAK	BTIR2401029	

Yuvraj  
Received

Sneha  
Received

Prityamshi  
Received

Bal Kishan  
Received

Aalok  
Received



## IOT Foundation Workshop Attendance Sheet

S. No.	Team No.	Student Name	Enrollment	Supplies
41	11	Dishant Sharma	0901CS231041	Arduino ✓ LED ✓
42		Divya Joshi	0901CS231042	Ultrasonic ✓ Servo ✓
43		Divyansh Dutt	0901CS231044	Bluetooth ✓ Dht11 ✓
44		Kratika Jain	0901CS231072	USB Cable ✓
45	12	Ansh Gautam	0901CE231012	Arduino ✓ LED ✓
46		Uday Pratap	BTCS2401138 <del>06910187</del>	Ultrasonic ✓ Servo ✓
47		Harsh Kumar	BTCS2401052 <del>8076446780</del>	Bluetooth ✓ Dht11 ✓
48				USB Cable ✓
49	13	Vaibhav Patidar	BTCS2401140	Arduino ✓ LED ✓
50		Kaustik Singhal	BTCS 2401068	Ultrasonic ✓ Servo ✓
51		Hitesh Sanghi	BTCS 2401060	Bluetooth ✓ Dht11 ✓
52		Kuldeep Ahirwar	0901AM231038	USB Cable ✓
53	14			Arduino LED
54				Ultrasonic Servo
55				Bluetooth Dht11
56				USB Cable
57	15			Arduino LED
58				Ultrasonic Servo
59				Bluetooth Dht11
60				USB Cable

Received

Rishi

Received  
Ansh

Received  
Km.

Received

Received