

Report on a Workshop on Real-time Implementation of IoT Using NodeMCU

On February 23rd, 2024, IEI Student's Chapter - EED, LDCE, organized a Workshop on Real-time Implementation of IoT Using Node MCU from 3:45 PM to 5:30 PM at Chanakya Hall, EED, LDCE. The speakers, Vaibhav Pandya, Gaurav Pal, and Shailendra Gupta, students of the 6th Semester Electrical, led the event, which had a total



of 66 attendees, primarily from the 1st and 2nd year students.



The workshop began with a speech by Prof. K .A. Bhatt, who explained the basics of microcontrollers and their evolution from early ages to contemporary times, along with discussing

the benefits of Arduino and its applications, illustrated with a simple example of code functioning.



The sessions then progressed, with Vaibhav Pandya, (student EED, semester-6). He provided detailing about the Arduino

Anatomy to the participants, explaining all the components present on the Arduino board and their functions. He also discussed topics such as the Crystall oscillator, Atmega328p, and Voltage regulator ICs.

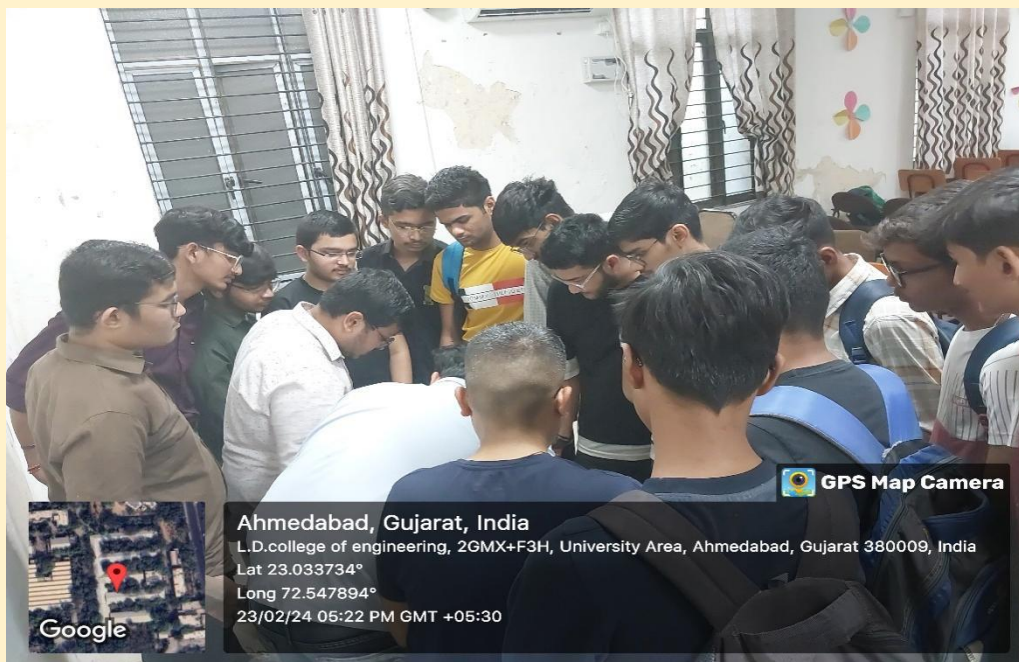
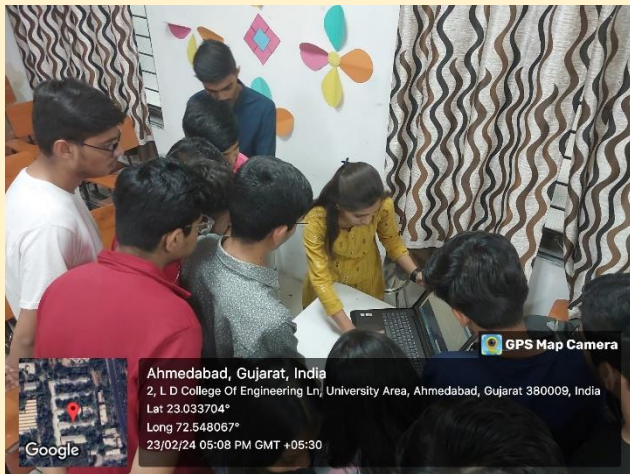


Thereafter, Shailendra Gupta (student, EED, sem-6) has provided an introduction to basic codes, including their syntax, I/O interface with Arduino, control structure, functions, communication protocol, and EEPROM.

After that, Gaurav Pal (student, EED, sem-6) explored IoT, explaining its concept, IoT development boards, and its applications, along with a brief introduction to Local Host, Global Host, Server-Client communication, Cloud communication, and various platforms that simplify the process of connecting hardware devices and managing data from the cloud for IoT development projects, such as Blynk IoT and ThingSpeak.

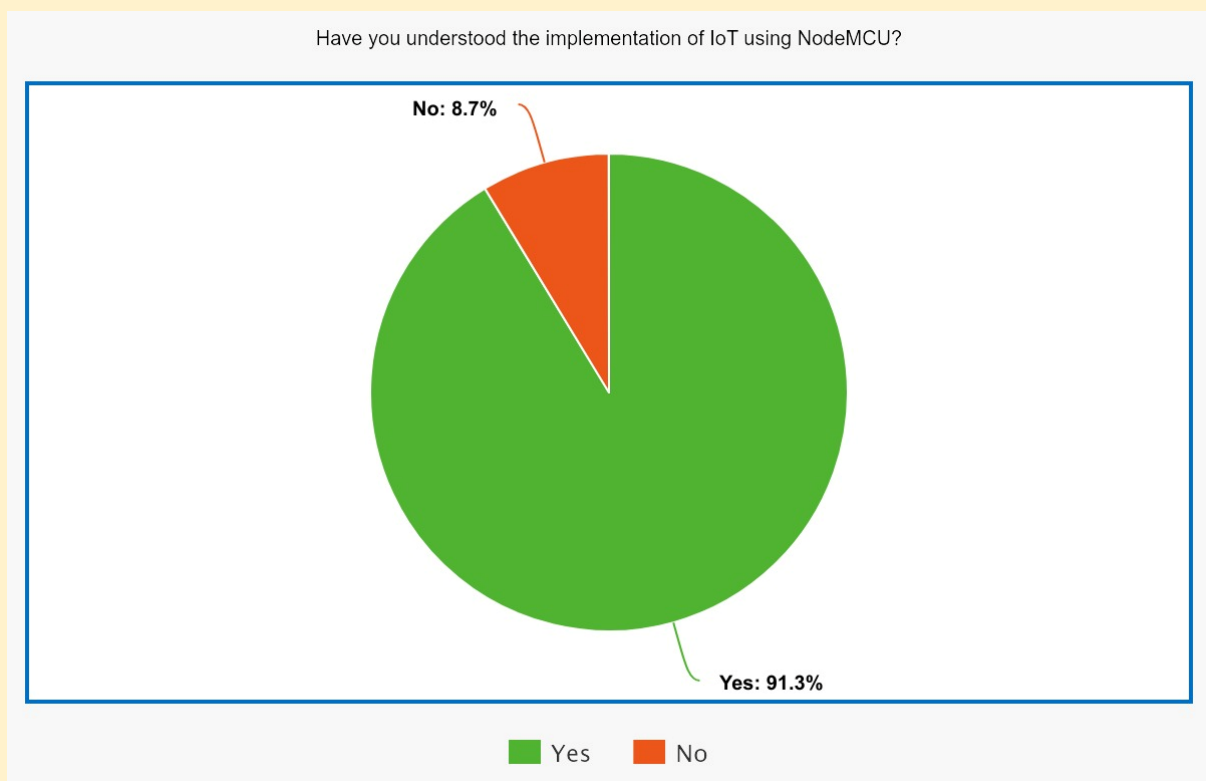
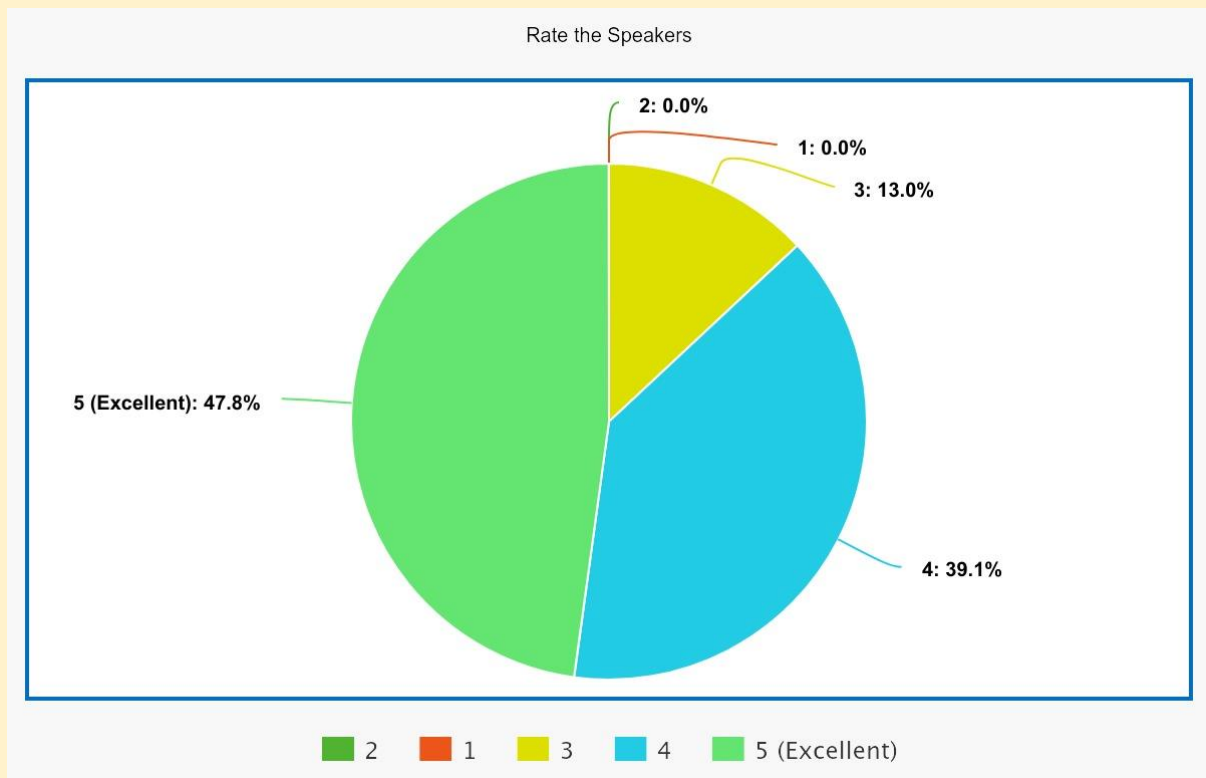
After the presentations concluded, hands-on sessions commenced. Eight projects were demonstrated, assisted by Deepak, Sneha, Raj, and Prince, who were also students of the 6th Semester Electrical Department. Demonstrations included Ultrasonic sensor, IR sensor,

LCD display, DHT11 interfacing with Arduino Uno, and IoT projects like DHT11 interfacing with NodeMCU and Blynk, Switch On-Off Bulb using a relay module, NodeMCU and Blynk, NodeMCU using as a Server, and NodeMCU using as WiFi access point.

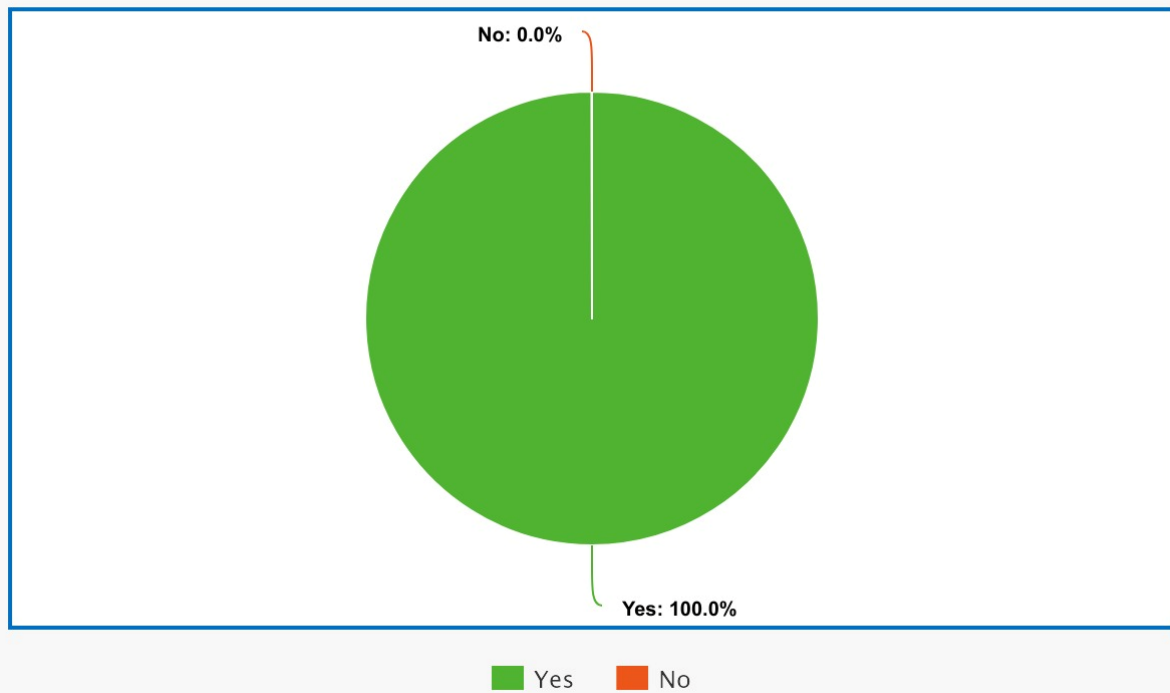


After demonstrating all the projects and addressing attendees' doubts during the demonstrations, the workshop concluded.

Below attached the responses of the feedback received from the attendees



Would you like to attend such other sessions?



Feedback about this session

