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Two days Workshop on IOT using Node-MCU

Report on Two-day Workshop on IOT using Node-MCU

Workshop on IOT using Node-MCU – ECE Department

The Electronics and Communication Engineering Department conducted a two-day Workshop on IOT using Node-MCU, on 14.11.19 and 16.11.19 for first slot students, and on 21.11.19 and 22.11.19 for second slot students.

This Workshop introduces students to the amazing world of IoT and its fascinating applications. Through this Workshop, students can build an IoT-based electronic device that can form the basis for smart buildings, smart irrigation systems, smart water monitoring, automatic street lighting systems, and home automation systems. They can also learn how to write programs, and relate the sensed data, and use Cloud computing concepts with Node-MCU.

DAY 1: INTRODUCTION TO IOT, NODE-MCU, AND HOME AUTOMATION

The students gathered at 9 am in NI LabView Lab. They were introduced to IoT architecture and applications, Cloud services and future challenges. Functions of Relay and different sensors were explained. They were also told about Pin configurations of Node-MCU and Blynk app, in detail. After a short break, the students installed Blynk app on their mobiles, and made the necessary software setup for running the program on their laptop.

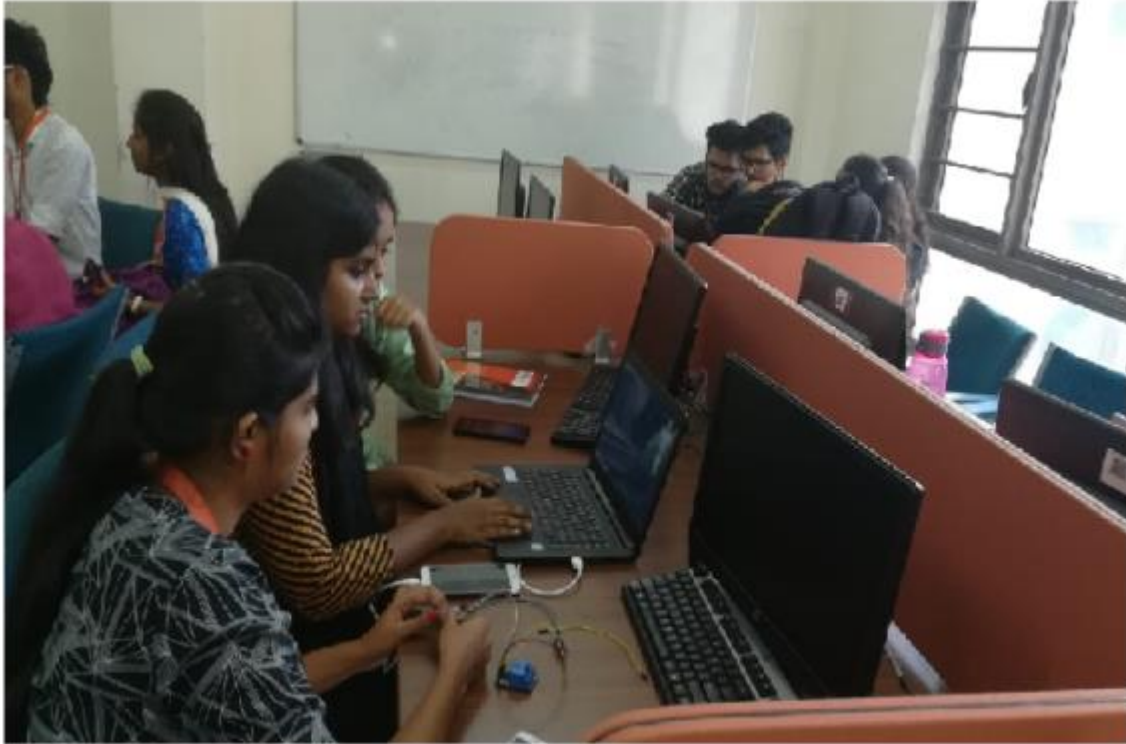
In the afternoon session, students had a hands-on experience of creating a Home automation project, with single and double module relays. They were able to control the *on* and *off* of components through the Blynk app in their mobiles.



Two-day Workshop on IOT using Node-MCU was organised by ECE Department on 21.11.2019&22.11.2019 at MVJCE.Students are doing software installation and App installation

DAY 2: HANDS-ON PROJECTS - SMART IRRIGATION, AUTOMATIC PARKING, TEMPERATURE AND HUMIDITY MONITORING

In the second day of the Workshop, the students had a hands-on experience in working on projects like smart irrigation, automatic parking, temperature and humidity monitoring. Sensors like temperature sensor, moisture sensor and IR sensors were used for these projects. An additional project using ultrasonic sensor for distance measurement was explained to students. Ideas for extending these projects were given to students.



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Event Coordinators:

1. Dr. D Tamilarasi, Associate Professor / ECE
2. Prof. P Pavithra, Assistant Professor / ECE

Outcome:

- The students got to know about the usage of Blynk app. They obtained hands-on experience on this Blynk app available in Google Playstore. They were able to control the application that they had created, using Blynk app.
- The students got a thorough insight into the availability of different kinds of sensors. They learnt how to store and handle sensor data from Cloud.
- The students understood how to implement Real time projects.
- They were excited, and enthused to carry forward the knowledge that they had gained, by doing mini projects and considering their Final year projects in IoT.