

MGM's College Of Engineering, Nanded
Department of Electronics and Telecommunications

Workshop On “Internet of Things”

Dept. of Electronics and Telecommunication conducted a workshop on **“Internet of Things”** on 9 June to 11 June 2022 for first year, second year, Third year & Final year students. By Dolphins Lab, Pune.

The workshop was conducted By professor **Mr. Chittaranjan Mahajan sir**, in conference hall. This workshop was conducted under the guidance of (Mrs. M A. BANWASKAR , Mr. D.J. TUPTWAR)





1.SOFTWARE AND HARDWARE OVERVIEW :

In this topic students gets familler with IOT technology,HTML , ESP8266 NODE MCU Hardware.

Course contents:

Overview

- Introduction to IoT
- Introduction to ESP Series
- Programming Basics
- GPIO Programming

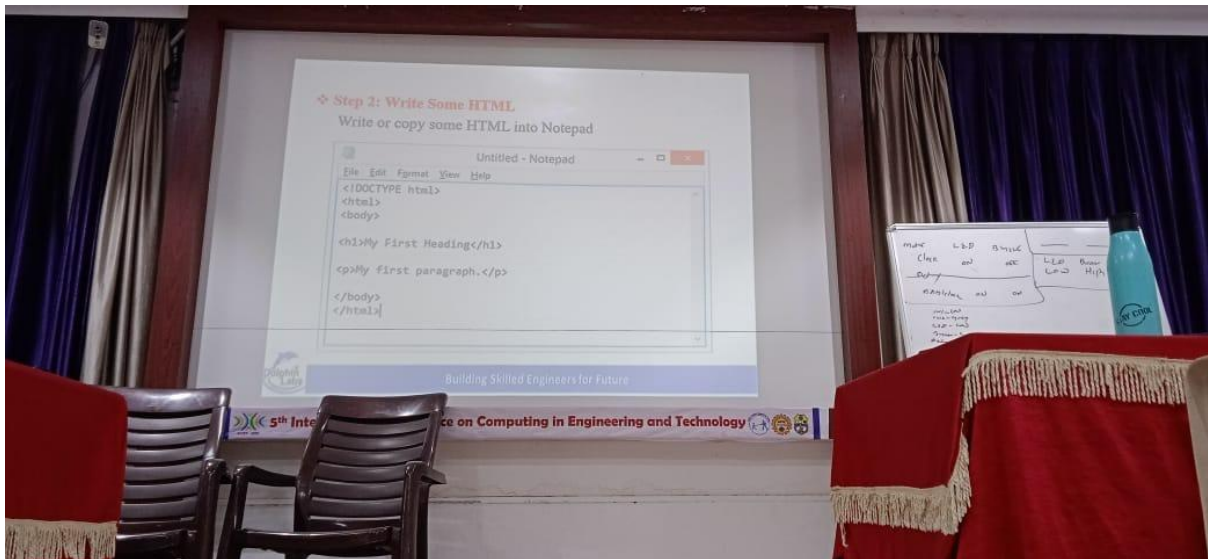
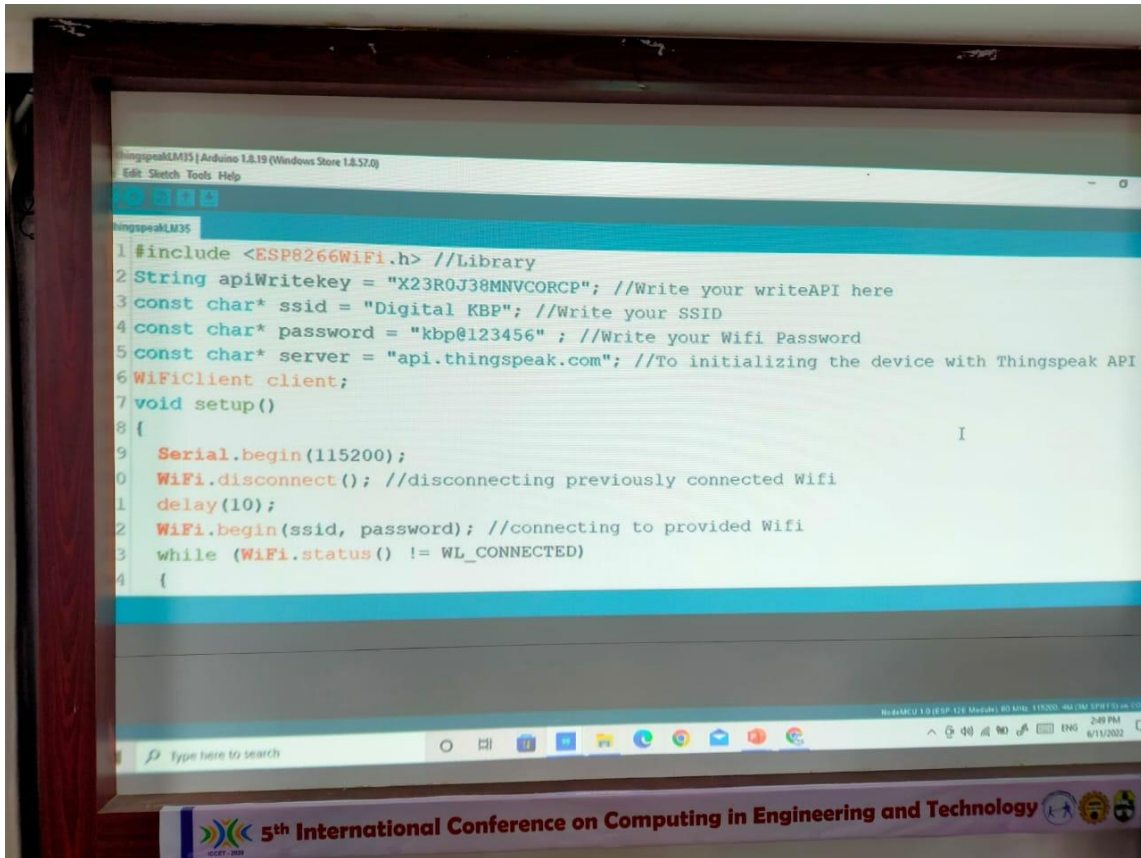
HTML OVERVIEW

- HTML Basics
- Wi-Fi Interfacing

Cloud Interfacing

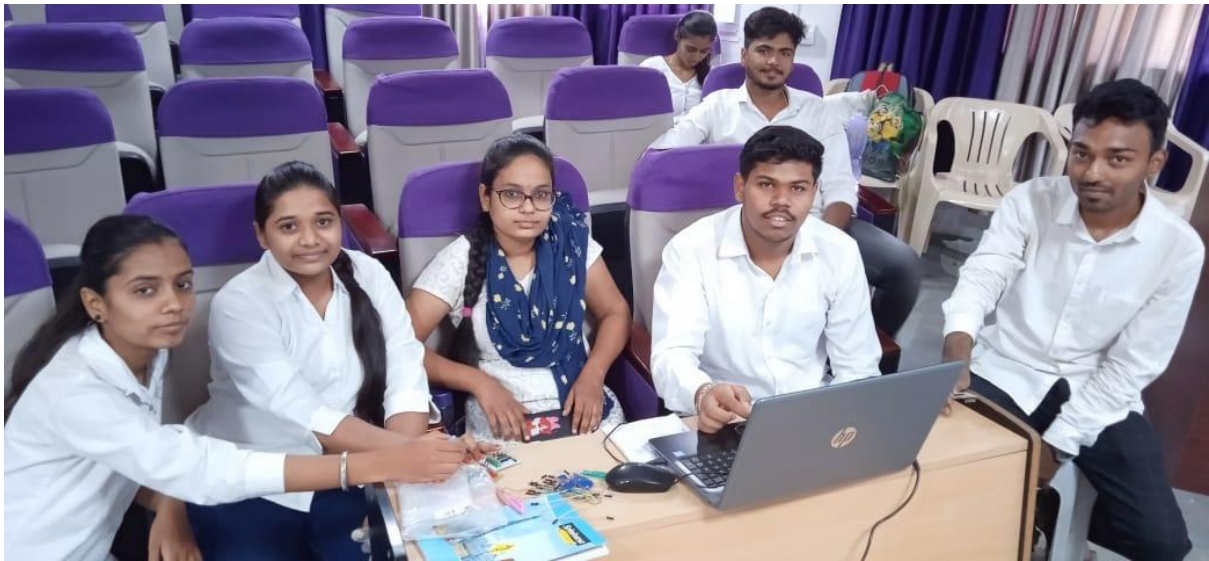
- IOT development
- Case studies

Internet of Things has created new opportunities in different industries. Agriculture, Energy, Healthcare, Transportation are most demanded sectors for internet of things. The internet of things is in its growing stage and there are huge upcoming opportunities. Internet of things is emerging as a third wave in development of internet. Internet of things has potential to connect more than 1.8Trillion “Things” to internet by 2025 ranging from bracelets to cars



This are the following groups of students who participated in this workshop.

GROUP A



GROUP B



2. Electronics components and Instruments:

This topic gives the brief introduction to “Internet of Things” and its applications and electronics devices. **How to Setup the ESP8266 Arduino IDE with the Node MCU V3 (ESP8266 ESP12e).** This session was conducted in Conference Hall.

BASIC PROJECT BUILDING

- LED Interfacing,
- Buzzer Interfacing,
- Relay Interfacing.
- ADC interfacing,
- Sensors Interfacing
- Temperature Measurement

ESP webservice

- ESP webservice and GPIO Programming
- ESP webservice LED Interfacing
- ESP webservice Buzzer interfacing
- ESP webservice Relay Interfacing
- ESP webservice ADC interfacing
- Website development for controlling and monitoring parameters
- Web controlled Robot

GROUP C



GROUP D



GROUP E

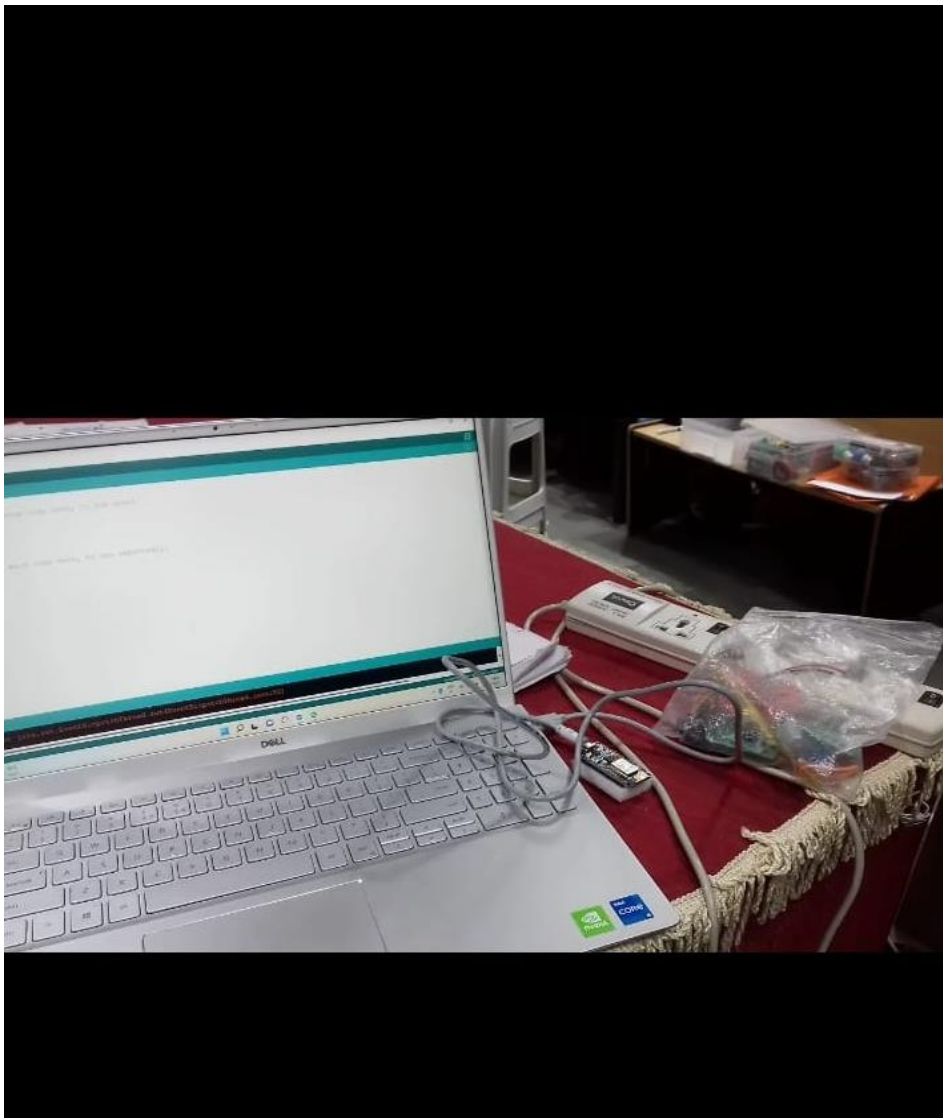


GROUP F



3.Introduction to IOT,Cloud infrastructure, HTML and NODE MCU ,ESP8266 based projects:

This workshop conducts the brief introduction to the IOT development and their applications or ESP8266 Series or HTML , Some projects on the ESP8266 were the students gets information that how we can make projects by using ESP8266 Node MCU , WiFi interfacing .





Successfully completed workshop with the best experience!!.