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A Report on

One day Online workshop

on

"Internet of things"

Organized by

Electronics & Communication and Electrical Engineering department & GIT-IQAC

on

05/02/2022

Gandhinagar Institute of Technology

Academic Year 2021-22



Level: - Departmental Category: - Workshop Date: - 05/02/2022 (1 Day) No. of Resource Person: 2 No. of Participants: - 38 Coordinator and Co-coordinator name: Prof. Hardik bhatt (Coordinator) Prof. Pavak Mistry (Co-Coordinator) Mode: - Online

Objective: Over the past few years, IoT has become one of the most important technologies of the 21st century. Now that we can connect everyday object kitchen appliances, cars, thermostats, baby monitor to the internet via embedded devices, seamless communication is possible between people, processes, and things. By means of low-cost computing, the cloud, big data, analytics, and mobile technologies, physical things can share and collect data with minimal human intervention. In this hyperconnected world, digital systems can record, monitor, and adjust each interaction between connected things. The physical world meets the digital world and they cooperate. This workshop will help students to gain knowledge in are of IOT and program will help students with their projects, competitions and create better career profiles

MANAGED BY PLATINUM FOUNDATION GANDHINAGAR INSTITUTE OF TECHNOLOGY "WHERE SUCCESS IS A TRADITION" (Approved by AICTE and Affiliated to Gujarat Technological University)

About Workshop:

This workshop was organized by the Electronics and communication & Electrical engineering department in the coordination with GITIQAC Cell of Gandhinagar Institute of Technology. 38 students have participated in this workshop. The goal of the workshop was to enhance the calibre of students for a recent requirement in the field of IOT. The event has been divided into two sessions. The first session is about the introduction of Internet of things. The second session is about Implementation of Internet of things with demonstration where we have demonstrated the remote of devices with help of blynk application.

Session wise content:

Session-1: Introduction

In the first session, the session was started by Prof. Hardik bhatt by delivering the introduction of Internet net of things and their importance. Prof. Hardik bhatt introduced process of IOT to the student and aware them of the importance and application of the IOT.



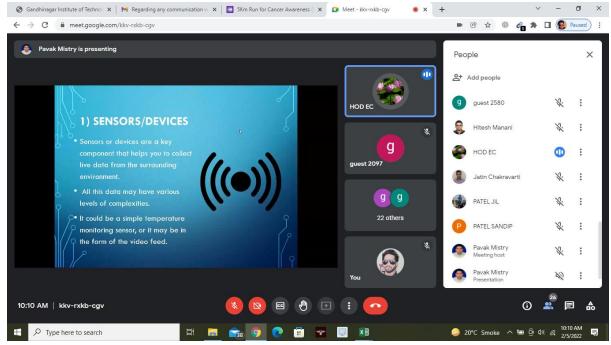
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Prof. Hardik bhatt starting the workshop

Prof. Hardik bhatt has given the basic introduction to the Topic



Prof. Hardik bhatt Discussing about the devices need for the implementation of Internet of things.

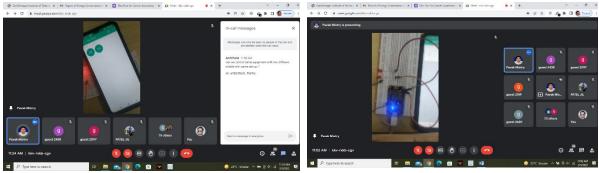
Session-2: Implementation of IOT with Blynk application

In the second session, the session was started by Prof. Pavak Mistry and Prof. Hardik Bhatt by delivering the introduction to blynk application and Arduino software. Prof.Pavak Mistry guided to about wifi controller Nodemcu. How to program the Nodemcu with the help to Arduino software. Also guided the different configuration for the Arduino software. Prof.Pavak Mistry also guided student about using the different widgets available in the blynk application. Demonstration of same has been done. Remote operation also demonstrated in the workshop



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Prof. Pavak Mistry Discussing about how to configure the blynk application

Prof. Pavak Mistry Demostrating the Remote operatio of LED.

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Prof. Pavak Mistry Discussing about how to program the Nodemcu using arduino software

Outcome: -

After completion of the workshop, students were come to know about the use of IOT for commercial industrial applications. They have studied all the fundamental of implementation of IOT. Controller and its programming. Very good feedback has been obtained from the students regarding their gain during the workshop.