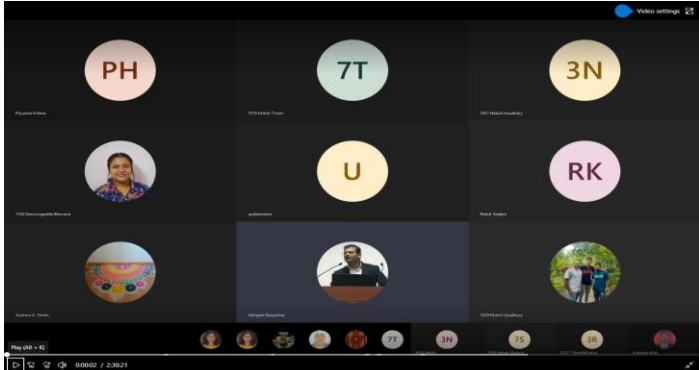
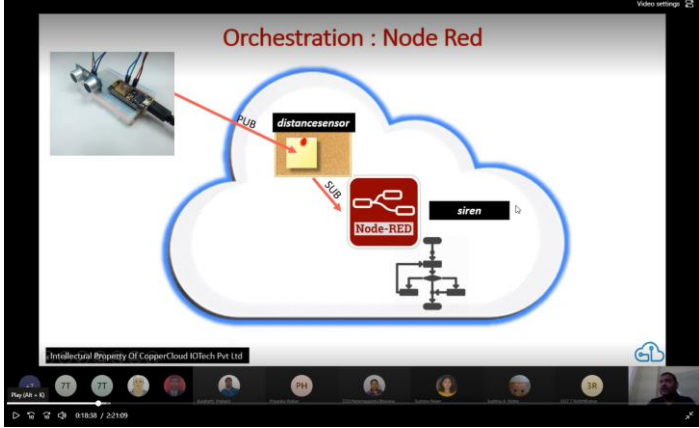


Activity Report Format

Required Field	Information to be filled
Link for publicity on Social media (Facebook//twitter/Instagram)	---
Academic Year	2021-2022
Name of coordinator	Sushama Shirke Assistant Professor Dept of Comp Engg.
Program/Activity/Name	WORKSHOP ON IOT & ENABLING TECHNOLOGIES
Select one of the Program Type (Workshop/FDP/Seminar/conference/Other)	WORKSHOP
Start Date	27/08/2021
End Date	29/08/2021
Mode of Session delivery (offline/online)	Online
Number of Student Participants	26
Number of Faculty Participants	11
Number of External Participants, If any	--
Expenditure Amount, If any	30,000/-
Objectives of activity	<ol style="list-style-type: none"> 1. To learn advances in Embedded Systems and IoT 2. To learn methodologies for IoT application development 3. To learn the IoT protocols, cloud platforms and security issues in IoT
Description of activity	<ul style="list-style-type: none"> - Introduction and history of IoT - IoT Logical & Physical Architecture - Examples of options for Power, Communication and Processing used in IoT - Embedded Systems - Communication Architecture for IoT Solutions - Device to Cloud Communication - MQTT Protocol - Orchestration & Middleware for IoT - Mobile to Device communication - Introduction to Databases - IoT Database design

	<ul style="list-style-type: none"> - SQL Introduction - Data Visualization - Industry Tools - Final IoT Project using Embedded, MQTT, Orchestration, Databases, Visualization and Mobile app
Faculty Name (Faculty involved in organizing event)	Prof. Sushama Shirke Mr. Ravindra Desai Ms. Sushama Pawar Ms. Priyanka Holkar Mr. Praveen Yadav
Student Name (student involved in organizing event)	Aman Thakur Aashna Vaid
Video URL (optional)	--
Photograph1	
Photograph2	
Session plan/Brochure/Document/overall report of the activity	

**Army Institute of Technology
Department of Computer Engineering**

NOTICE

Date: 25th August 2021

This is to inform concerned members to perform the following roles and responsibilities assigned to you during the conduction of WORKSHOP on IOT & ENABLING TECHNOLOGIES by ABHIJEET DEOGIRIKAR FROM COPPERCLOUD IOTech, from 27th August to 29th August 2021.

Schedule of Workshop:

Day1:

- Introduction and history of IoT
- IoT Logical & Physical Architecture
- Examples of options for Power, Communication and Processing used in IoT
- Embedded Systems

Day2:


- Communication Architecture for IoT Solutions
- Device to Cloud Communication
- MQTT Protocol
- Orchestration & Middleware for IoT
- Mobile to Device communication

Day3:

- Introduction to Databases
- IoT Database design
- SQL Introduction
- Data Visualization
- Industry Tools
- Final IoT Project using Embedded, MQTT, Orchestration, Databases, Visualization and Mobile app

Sr. No.	Date	Morning Time Slot	Afternoon Time slot
Workshop In charge			
1. Prof. Sushama Shirke	27 th August to 29 th August 2021	10.00am to 12.30pm	1.30pm to 4.00pm
Workshop Assistance			
1. Mr. Ravindra Desai	27 th August 2021	10.00am to 12.30pm	1.30pm to 4.00pm
2. Mr. Pravcen Yadav	27 th August 2021	10.00am to 12.30pm	1.30pm to 4.00pm
3. Ms. Sushma Pawar	28 th August 2021	10.00am to 12.30pm	1.30pm to 4.00pm
4. Ms. Priyanka Holkar	29 th August 2021	10.00am to 12.30pm	1.30pm to 4.00pm

Note: For any queries contact to Workshop In-charge Ms. Sushama Shirke


Ms. Sushama Shirke
IoT Workshop Coordinator


Head of the Department of
Computer Engg. AIT, Pune

Document No: CIPL/Trg/2021/34

Date: 12 Aug 2021

Proposal for Conducting IoT Workshop for TE (CSE) Students at AIT Pune

1. Reference:

- a) Document on One-Credit Courses offered by CopperCloud to AIT CSE Dept
- b) Subsequent discussion with HoD CSE at AIT on 09 Aug 2021.
- c) CopperCloud is pleased to conduct a technical workshop on **"Internet of Things (IoT) & Enabling Technologies"** for TE (CSE) at AIT.

2. Expected Outcome:

At the end of the workshop, the participants:

- a. Will develop the technical skills to design and build simple IoT solutions
- b. Will be familiar with the Architecture, Tools, techniques and Practices that the Industry leverages
- c. Will understand the significance of **emerging open source Industry tools and practices toward rapid delivery of IT projects & products**
- d. Will be empowered to select projects based on a wider range of technologies
- e. Will be empowered to interact with Industry experts using the industry terminology in their projects, interviews, and other interactions

3. Title of the Workshop: "Internet of Things (IoT) & Enabling Technologies"

4. Coverage of the Workshop:

- a. Introduction & History of IoT - *Gateway to the Physical World*
- b. **IoT Building Blocks –**
(Embedded, Communication, Orchestration, Data, Visualization)
- c. IoT Logical & Physical Architecture
- d. IoT Communication Architecture
- e. IoT Orchestration – Middleware
- f. IoT Data & Visualization (user dashboards)
- g. Overview of Cloud Services
- h. **Industry Tools, Techniques & Practices –**
(MQTT, Node Red, Grafana, Agile, Federated Architecture)
- i. **Practical Demos & Hands-on assignments**
- j. **Case Studies – Industry4.0**

5. Modalities:

- **Duration** – 15 hours online mode, Instructor-led
- **Spread over 3 consecutive days (5 hours each Day)**
- **During the online workshop, assignments will be simulator-based, and Demos**
- **When the students are back in Campus, CopperCloud offers to host an additional session of 3 hours in the AIT Lab to do physical hands-on**
- **The Training sessions will be conducted by Industry Experts in the field of IoT and other emerging technologies**

6. Batch strength: Up to 60 (due to online mode)

7. Certificates: Certificates will be issued to participants by CopperCloud

8. Financials: It is proposed to conduct the Program **on an hourly rate basis.**

Normal rates for conduct of workshops by CopperCloud is ₹2500/- per hour. However, CopperCloud is offering preferential rates of **₹2000/- per hour.**

9. Mode of Payment:

Electronic Payment / Demand Draft / Bank Cheque

Account Details for Payment:

Beneficiary : COPPERCLOUD IOTECH PVT LTD
Acct Number : 50200035247792
Acct Type : CURRENT
Bank : HDFC Bank
IFSC Code : HDFC0000039

10. Validity: The offer is valid up to 15 Sep 21.

We at CopperCloud look forward to continue our cherished association with the Army Institute of Technology.

Regards,

Abhijeet Deogirikar

Founder & CEO, CopperCloud IoTech
Mobile: +91 77980 32613

iot@coppercloud.in

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