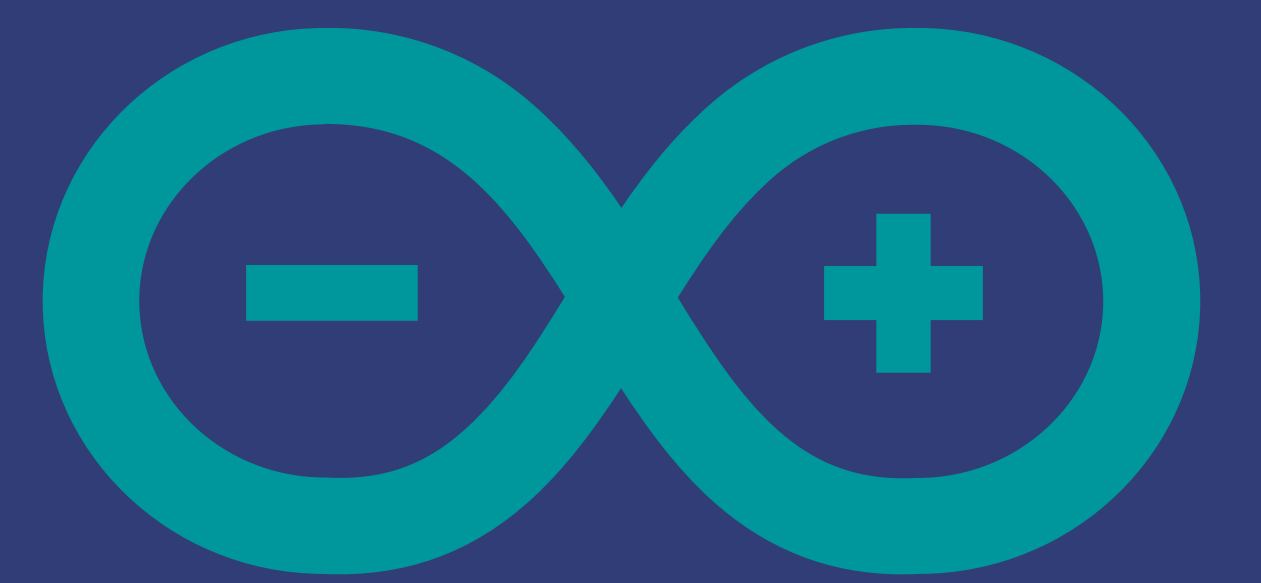
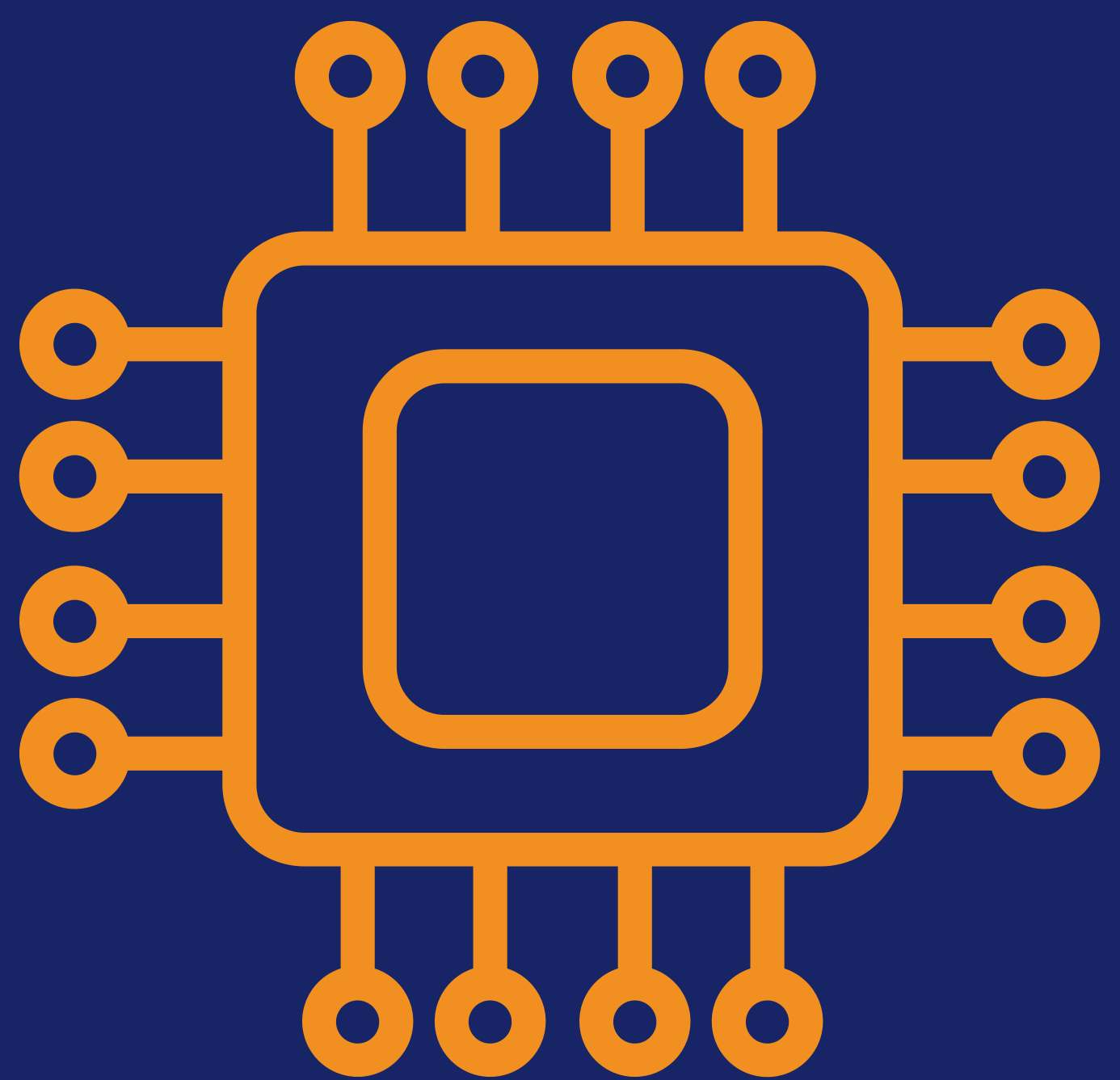
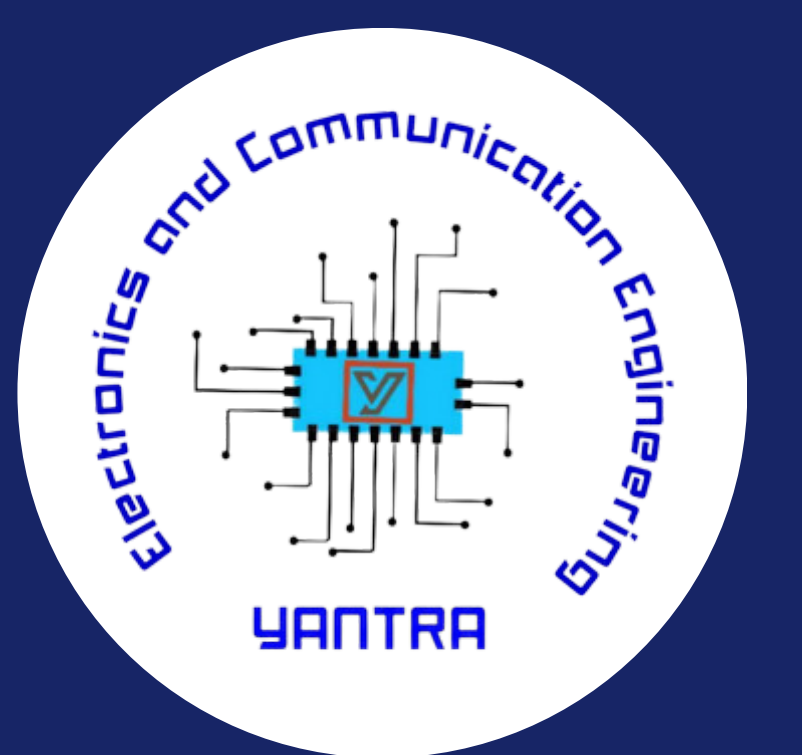




**PANIPAT INSTITUTE OF  
ENGINEERING & TECHNOLOGY**

(Approved by AICTE, New Delhi & Affiliated to Kurukshetra University, Kurukshetra)



**Department of ECE**

Presents

# **ELECTRONICA**

**4th Edition (2021 - 2022)**

# About Department of ECE

## Vision

To excel globally in technical education and research in the field of electronics and communication engineering and thus contribute to the welfare of society.

## Mission

**M1:** To establish a unique learning environment to enable the students to face the ever-emerging challenges in electronics and communication engineering.

**M2:** To equip the students with a broad intellectual spectrum and prepare them for diverse and competitive career paths.

**M3:** To provide practical orientated education and foster tie-up with national/International educational institutes, research bodies, and industry to support students and faculty development pursuits.

**M4:** To provide ethical and value-based education by promoting activities addressing societal needs.

## Program Educational Objectives (PEOs)

**PEO1:** Be able to successfully practice electronics and communication engineering with acquired skills and knowledge.

**PEO2:** Be receptive to new technologies and attain professional competence through advanced education, research work, and other professional activities.

**PEO3:** To prepare graduates who will practice their profession with ethics, integrity, and social responsibility in a global context.

**PEO4:** To develop leadership qualities with demonstrable attributes and to contribute to societal needs.



## From Director's Desk

It gives me immense satisfaction that next issue of ECE Newsletter is ready for the readers. A college Newsletter mirrors the success story of an institution and act as a great medium to reach out to the outer world. It reflects upon the persistent and committed efforts made by faculty, staff and students for taking the institution one step ahead. Continuing the same tradition, this issue of Nexus reflects upon commendable contribution made by all members of PIET family in their fields of expertise as well as for the overall growth of the college.

I congratulate everyone for their bit of service for the institution and do expect the same in times to come. I also congratulate the editorial team for bringing out present issue of newsletter.

Wish you good luck!

Prof. (Dr.) Shakti Kumar  
(Director)



# From HOD's Desk

Dear Readers  
Greetings to you!!

The newsletter is a forerunner of all departmental technical activities. With the well qualified faculty & energetic students, the club aims and continuously works for the technical enhancement. The newsletter covers the activities & achievements of the students & faculty. I am pleased to present the issue before the readers.

Educational tours and industrial visits are also arranged to get in touch with the latest technologies used in the industries. In order to prepare the students for industrial exposure, they are given personality development classes to enrich their interpersonal skills. The students are placed in leading hardware and software companies of the country and abroad.

“Winners don't do different things. They do things differently” – Shiv Khera

Monika Gambhir  
Associate Prof.(Dr.)  
ECE Department



## Faculty Editor's Note

It is with immense pride and great pleasure that we present to you the latest issue of the Department of Electronics and Communication Engineering (ECE) Newsletter. This publication represents the collective achievements, progress, and milestones of our dynamic and ever-evolving department.

We have strived to ensure that this edition offers a comprehensive and vibrant portrayal of the department's activities, highlighting the various events, seminars, projects, and research breakthroughs that reflect the department's commitment to excellence.

Please feel free to drop in your suggestions to :  
[sapna.ece@piet.co.in](mailto:sapna.ece@piet.co.in)

Ms. Sapna Arora  
Assistant Prof.  
ECE Department



# Student Editor's Note

It is an absolute honor to contribute to the ECE Department's newsletter as a student editor. The ECE Department at PIET has always been a hub of innovation, creativity, and academic excellence. It continuously strives to empower students with cutting-edge knowledge and practical skills, preparing us to excel in an ever-evolving technological world.

A special mention goes to the dedicated members of the Yantra Club, who have been a driving force in fostering a culture of technical exploration and hands-on learning. Through their efforts, students have had the opportunity to engage in exciting projects, workshops, and competitions, fueling their passion for electronics and communication engineering.

I look forward to many more achievements from our vibrant ECE community and the continued success of the Yantra Club.



**HIMANSHU**  
(Chief Editor)



**RISHABH JAIN**  
(Co-Editor)

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- PCB designing and Fabrication using Workshop
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# Article: Industrial Machine Connectivity on AWS

The Industrial Machine Connectivity (IMC) Quick Start helps you bring data from your Industrial Internet of Things (IIoT) assets to the Amazon Web Services (AWS) Cloud in a structured way. It's for developers and AWS Partners, regional and global systems integrators, independent software vendors, and original equipment manufacturers who want to generate immediate business value from an IIoT architecture. The primary objective of the IMC Quick Start is to help AWS Partners deliver a proof of concept that addresses a use case of high value to the customer. For example, the customer might want to start by visualizing near-real-time operational metrics and analyzing root causes when a line goes down. After a successful proof of concept, the partner and customer may work together to build out the production architecture to address other critical use cases. The IMC architecture includes AWS managed IIoT edge services and AWS-qualified edge hardware. You can use a range of programmable logic controllers (PLCs). And you can publish data over various protocols: HTTPS, MQTT (Message Queuing Telemetry Transport), and OPC Unified Architecture (UA). With this Quick Start, you can automate production rollout of a connected-factory architecture across multiple sites. You can organize, store, and manage your IIoT data in various ways:

- Create or transfer virtual assets.
- Create or transfer asset hierarchies.
- Create a time-series hot-data store.
  - Transfer data from a historian or a SCADA (supervisory control and data acquisition) system.
- Archive cold data in Amazon Simple Storage Service (Amazon S3).

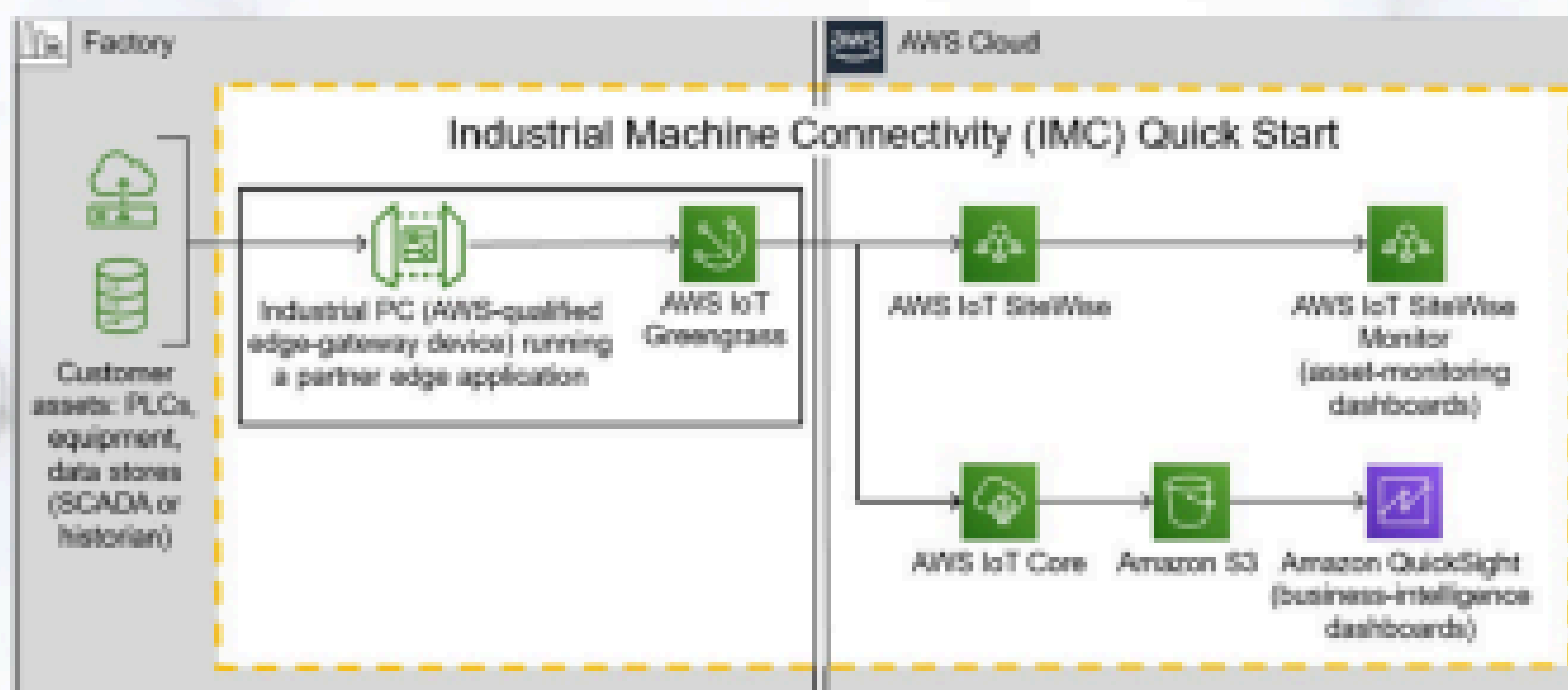
When you launch the IMC Quick Start, an AWS CloudFormation template automates the deployment of resources into your AWS account. You deploy this Quick Start in either virtual mode (for evaluation and training) or physical mode (for customer deployments).



The mode you choose depends on whether your edge hardware is virtual or physical. The architecture for virtual edge hardware includes an Amazon Elastic Compute Cloud (Amazon EC2) instance. The architecture for physical edge hardware includes an industrial PC on the customer's premises. The mode determines the way you configure connectivity and security. All other cloud-based resources are largely the same for virtual and physical deployments.

This diagram shows a high-level view of a physical deployment. The dotted orange box outlines the IMC Quick Start's main components. The mode you choose depends on whether your edge hardware is virtual or physical. The architecture for virtual edge hardware includes an Amazon Elastic Compute Cloud (Amazon EC2) instance. The architecture for physical edge hardware includes an industrial PC on the customer's premises. The mode determines the way you configure connectivity and security. All other cloud-based resources are largely the same for virtual and physical deployments.

This diagram shows a high-level view of a physical deployment. The dotted orange box outlines the IMC Quick Start's main components.



• In the factory:

- AWS IoT Greengrass runs on an industrial PC (an AWS-qualified edge-gateway device). AWS IoT Greengrass ingests data from a partner edge application, such as Inductive Automation's Ignition or PTC's KEPServerEX.
- The partner edge application translates the data from the customer assets—including PLCs, equipment, and data stores (SCADA or historian)—into industrial protocols.

• In the AWS Cloud:

- AWS IoT SiteWise stores the metadata for the asset-model hierarchy of the industrial assets on the factory floor. It also contains a managed database for the time-series data generated by these assets.

- After the hierarchy is defined in AWS IoT SiteWise, the partner edge application continuously ingests the asset data and transmits it to the AWS Cloud through a SiteWise connector within AWS IoT Greengrass.

- AWS IoT SiteWise serves as the hot-storage tier for both time-series data and metadata. All this data, including the metadata, is accessible to applications that can generate business value from it.

- The AWS IoT SiteWise Monitor feature enables you to build dashboards to visualize nearreal-time time-series data stored in AWS IoT SiteWise's time-series database.

- AWS IoT Core receives and routes MQTT messages either directly from the partner edge application or from the AWS IoT Greengrass core.

- Amazon S3 can serve as a cold-storage tier for data.

- Amazon QuickSight lets you build custom business-intelligence dashboards and visualizations for data stored in the S3 bucket.

-Harsh Aggarwal

2819290,ECE

# Webinar: Roadmap to Crack Internship & placement Interviews

**CODING NINJAS**

**VIT VELLORE**

**WEBINAR on**  
ROADMAP TO  
CRACK INTERNSHIP  
& PLACEMENT INTERVIEWS

IN ASSOCIATION WITH DEPARTMENT OF ECE PIET

**24<sup>TH</sup> JULY | 4 PM**

**NAVDEEP SANDHU**  
Instructor & Content Developer

Exclusive Talk by  
**RITISH MADAN**

**ALUMNUS**  
CODING NINJAS  
& PIET, PANIPAT

**SE**  
**dh**  
Digital Hub

Department of Electronics & Communication Engineering organized a webinar on Roadmap to Crack Internship & placement Interviews in India on 24 July, 2021.

## Objective

- To share the job and internship opportunities
- To share tips for cracking interviews for Internship & placement in India and Abroad
- To take -up and resolve the student's queries regarding job and internships

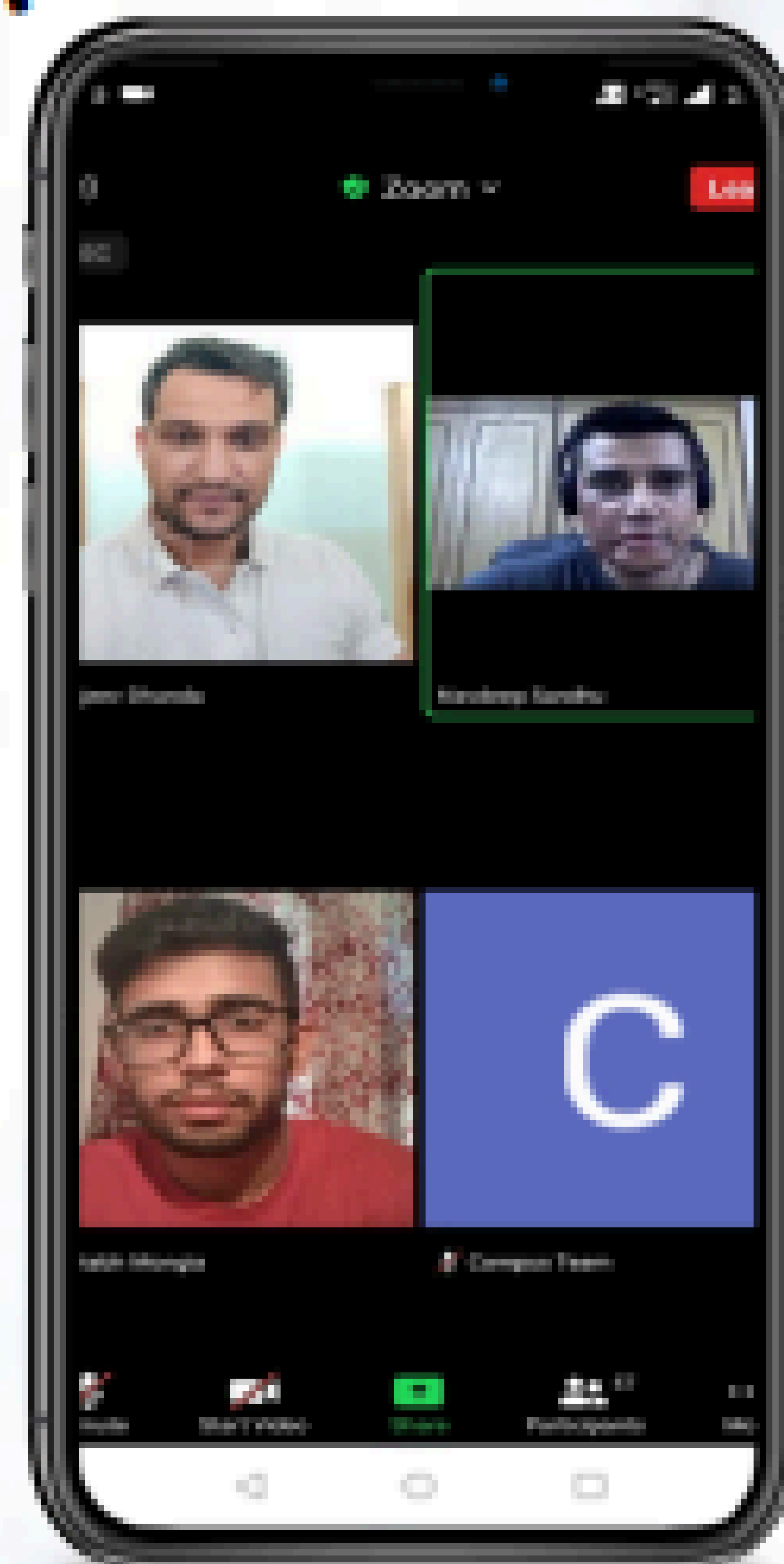
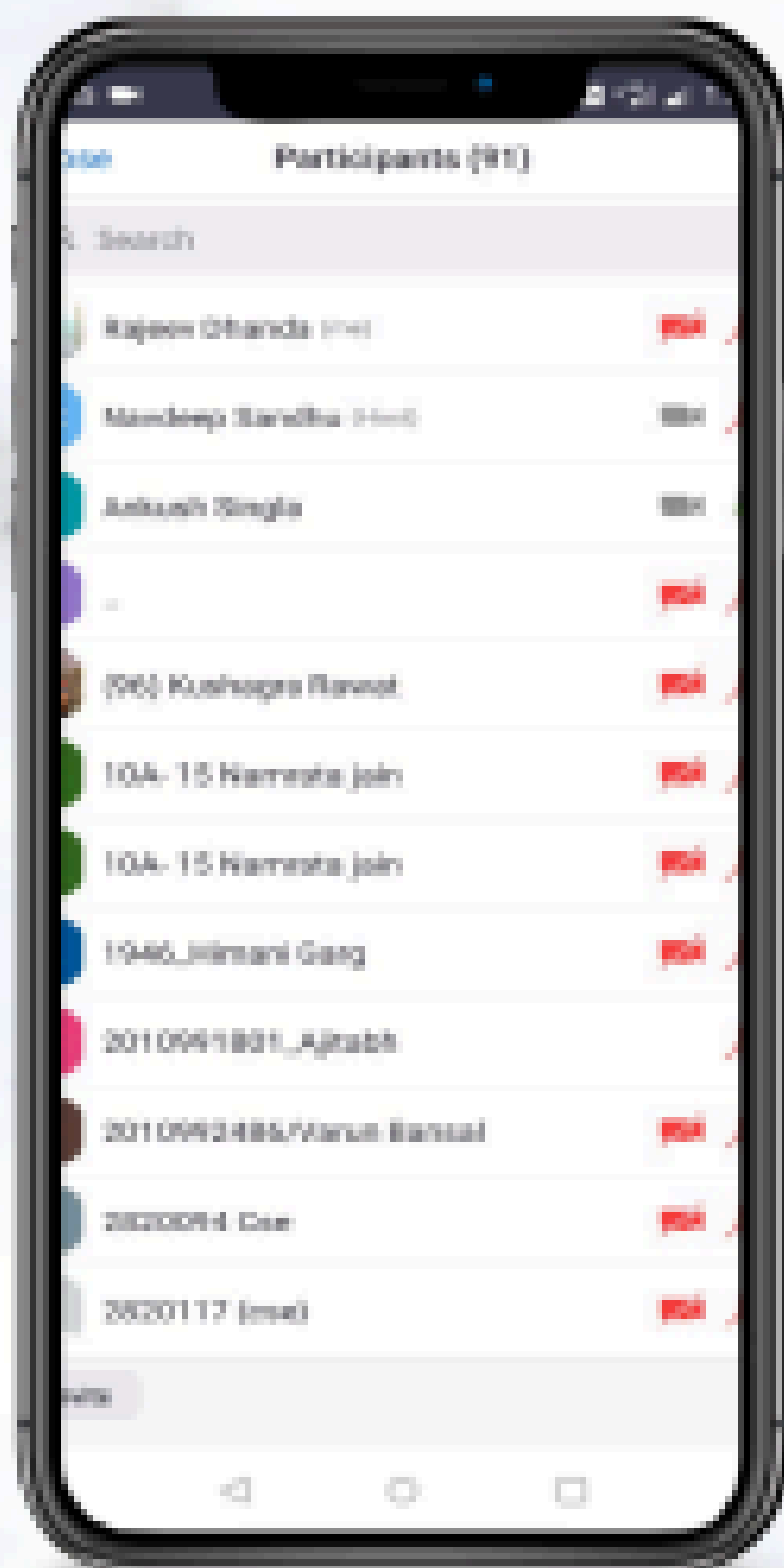
## Outcome:

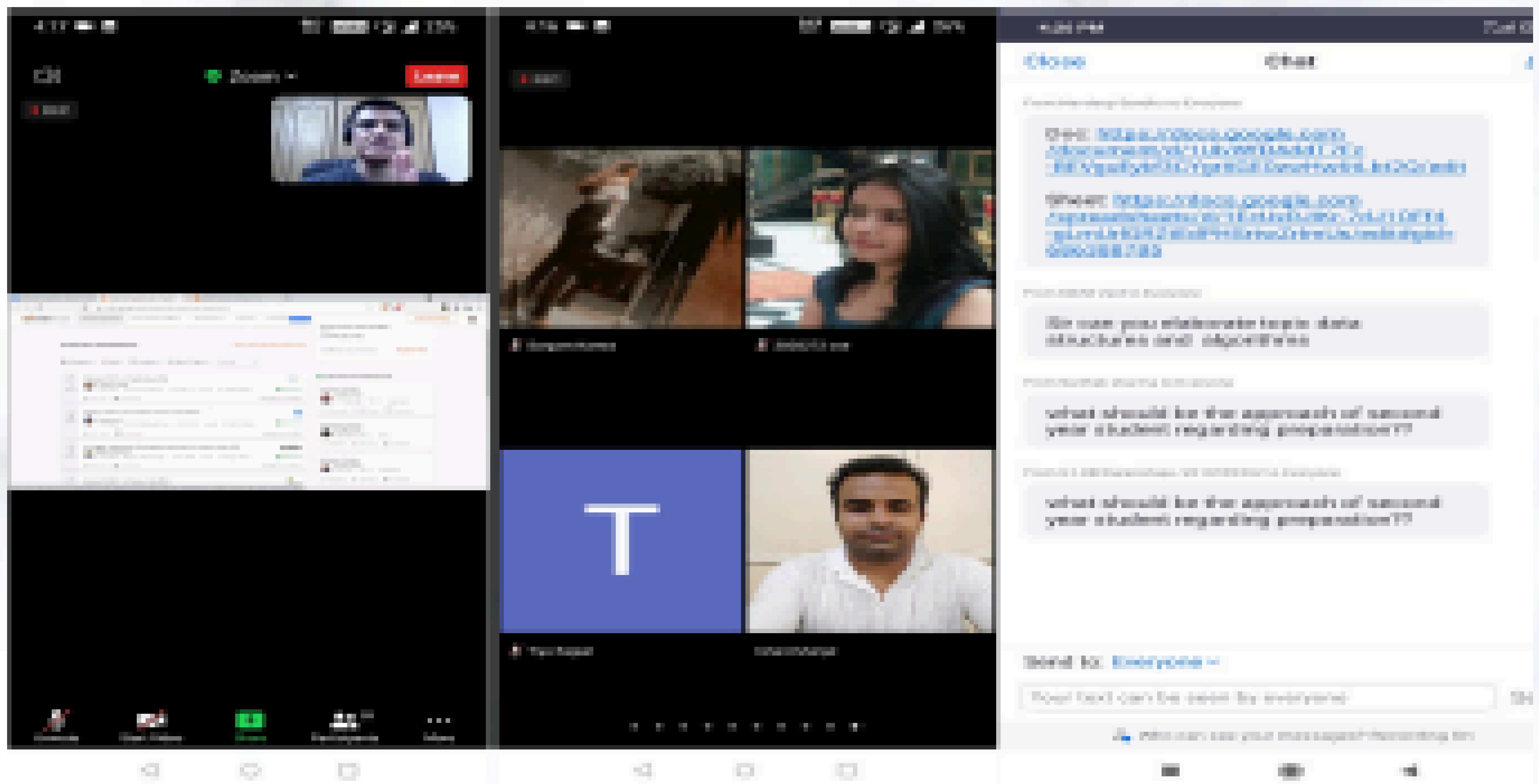
90 students and 11 faculty members participated in the event.

## About Activity:

Coding Ninjas was founded in 2016 to bridge the knowledge gap between colleges and industry. Founded by Ankush Singla, Kannu Mittal and Dhawal Parate, Coding Ninjas boasts of world-class teaching faculty and a state-of-art learning platform for Coding education with faculty alumni of IIT, Stanford, IIIT and Facebook. Coding Ninjas teaches 17+ Programming courses in Foundation, Advanced, Data & Development courses such as Machine Learning, Data Science, Web Development, Android and more. Today, Coding Ninjas ecosystem comprises of 40,000+ students and alumni, 1000+ Campus Ambassadors, 2000+ Teaching Assistants, and 150+ employees.

## *Glimpse of the event*



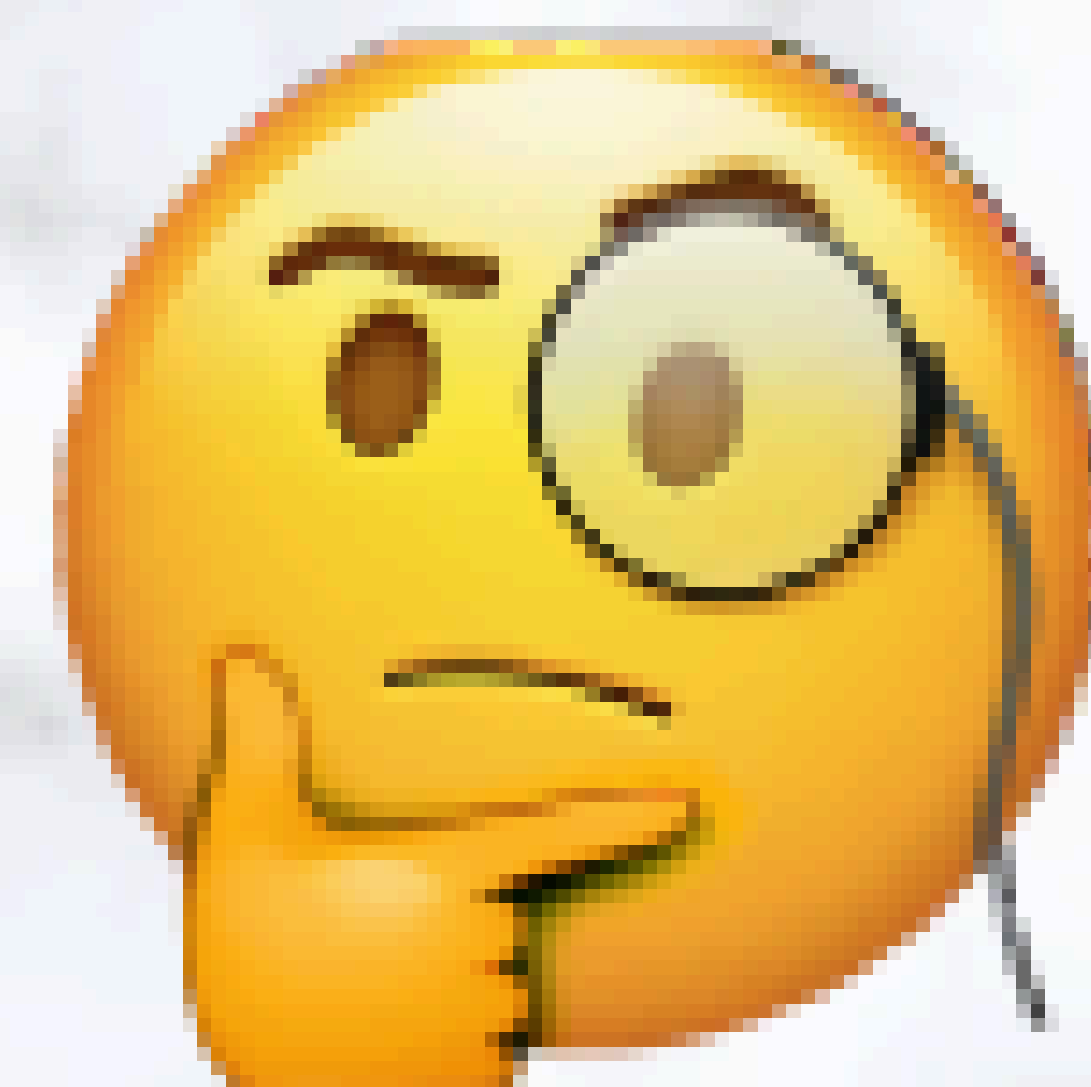


## ***Coding Ninjas Session Feedback***

	A	B	C	D	E	F	G
Sl. No	Time/Day	How satisfied were you with the event?	How relevant and helpful do you think it was for you?	How satisfied were you with the session content?	Any overall feedback for the event?	Name and Roll Number	Department
1							
2	30/10/23- 10:41 PM GMT+1:30	3	4	4	Good	Rajeev Kumar and 2010	BCE
3	30/10/23- 10:50 PM GMT+1:30	3	5	3	Verdi	Mohak, 20	BCE
4	30/10/23- 11:00 PM GMT+1:30	3	4	3	PERFECT	ADAR SHARMA PATIL 20	BCE
5	30/10/23- 11:14 PM GMT+1:30	3	5	3	Good	Yashraj 201901	CSE
6	30/10/23- 11:27 PM GMT+1:30	4	4	4	Good	201927	BCE
7	30/10/23- 11:44 PM GMT+1:30	4	4	3	The session was quite informative	Lakshya 201924	BCE
8	30/10/23- 11:51 PM GMT+1:30	3	5	3	PERFECT	Harsh Wadhwa 201921	CSE
9	30/10/23- 11:51 PM GMT+1:30	4	4	4	Could've had more knowledge regarding coding	Priyanshu Sharma, 201920	BCE
10	30/10/23- 12:20 PM GMT+1:30	3	5	3	Good	Garvit and 201905	CSE
11	30/10/23- 12:51 PM GMT+1:30	3	5	3	Amazingly well!	Siddhant 201917	CS
12	30/10/23- 14:07 PM GMT+1:30	3	5	3	Good	Devak 201940	BCE
13	30/10/23- 15:11 PM GMT+1:30	4	5	4	PERFECT	Rishabh Singh 201920	BCE
14	30/10/23- 4:11 PM GMT+1:30	4	4	4	Good	Garvit Sharma,201905	BCE
15	30/10/23- 4:44 PM GMT+1:30	4	4	3	PERFECT	Mohankrishna (201920)	BCE
16	30/10/23- 7:54 PM GMT+1:30	4	4	4	Good	Yash 201910	CSE

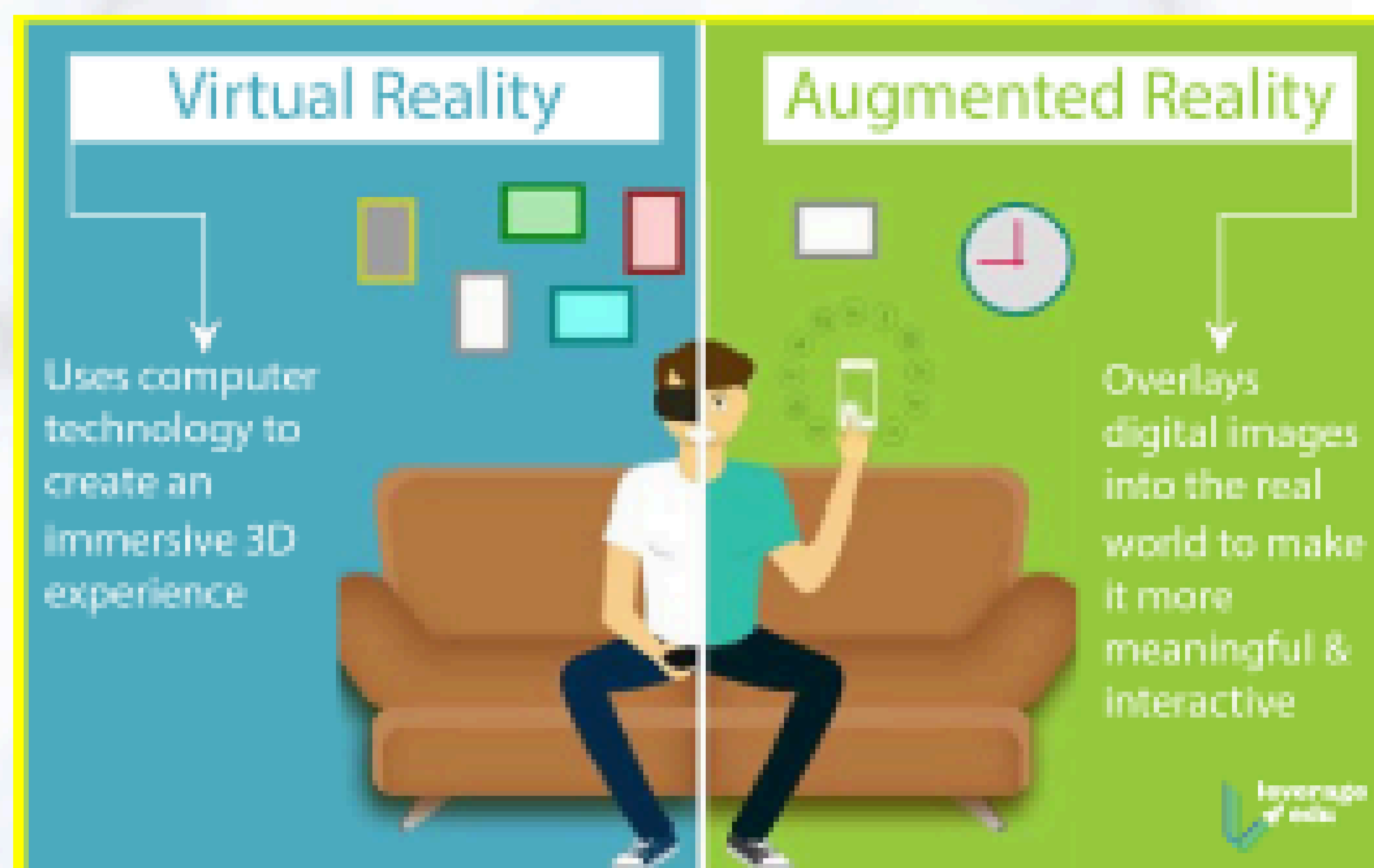
# Brain Teaser ???

1. What kind of dog never bites?
2. What wears a cap but has no head?
3. What starts with E, end with E and only has one letter?
4. What starts with a T, end with a T and is full of T ?
5. What three letters can frighten a thief away?
6. How many cheese sandwiches can you eat on a empty stomach?
7. What can you hold in your left hand, but not in right hand?
8. Why is six afraid of seven?
9. I have cities but no houses, forests but no trees, rivers but without water; what i am?
10. When will a net hold water?



1. Hot Dog 2. Bottle 3. Envelope 4. Teapot 5. ICU 6. Only One 7. Your Right Hand 8. Bcoz seven eight(ate) nine 9. Map 10. When the water is frozen

# Virtual Reality and Augmented Reality



The next exceptional technology trend - Virtual Reality (VR) and Augmented Reality (AR), and Extended Reality (ER). VR immerses the user in an environment while AR enhances their environment. Although this technology trend has primarily been used for gaming thus far, it has also been used for training, as with VirtualShip, a simulation software used to train U.S. Navy, Army and Coast Guard ship captains.

In 2022, we can expect these forms of technologies being further integrated into our lives. Usually working in tandem with some of the other emerging technologies we've mentioned in this list, AR and VR have enormous potential in training, entertainment, education, marketing, and even rehabilitation after an injury. Either could be used to train doctors to do surgery, offer museum goers a deeper experience, enhance theme parks, or even enhance marketing, as with this Pepsi Max bus shelter.

Fun fact: 14 million AR and VR devices were sold in 2019. The global AR and VR market is expected to grow to \$209.2 billion by 2022, only creating more opportunities in the trending technology, and welcoming more professionals ready for this game-changing field.

While some employers might look for optics as a skill-set, note that getting started in VR doesn't require a lot of specialized knowledge - basic programming skills and a forward-thinking mindset can land a job; another reason why this new technology trend should make up to your list of lookouts!

-Himanshu  
2819291, ECE

# PLACEMENTS



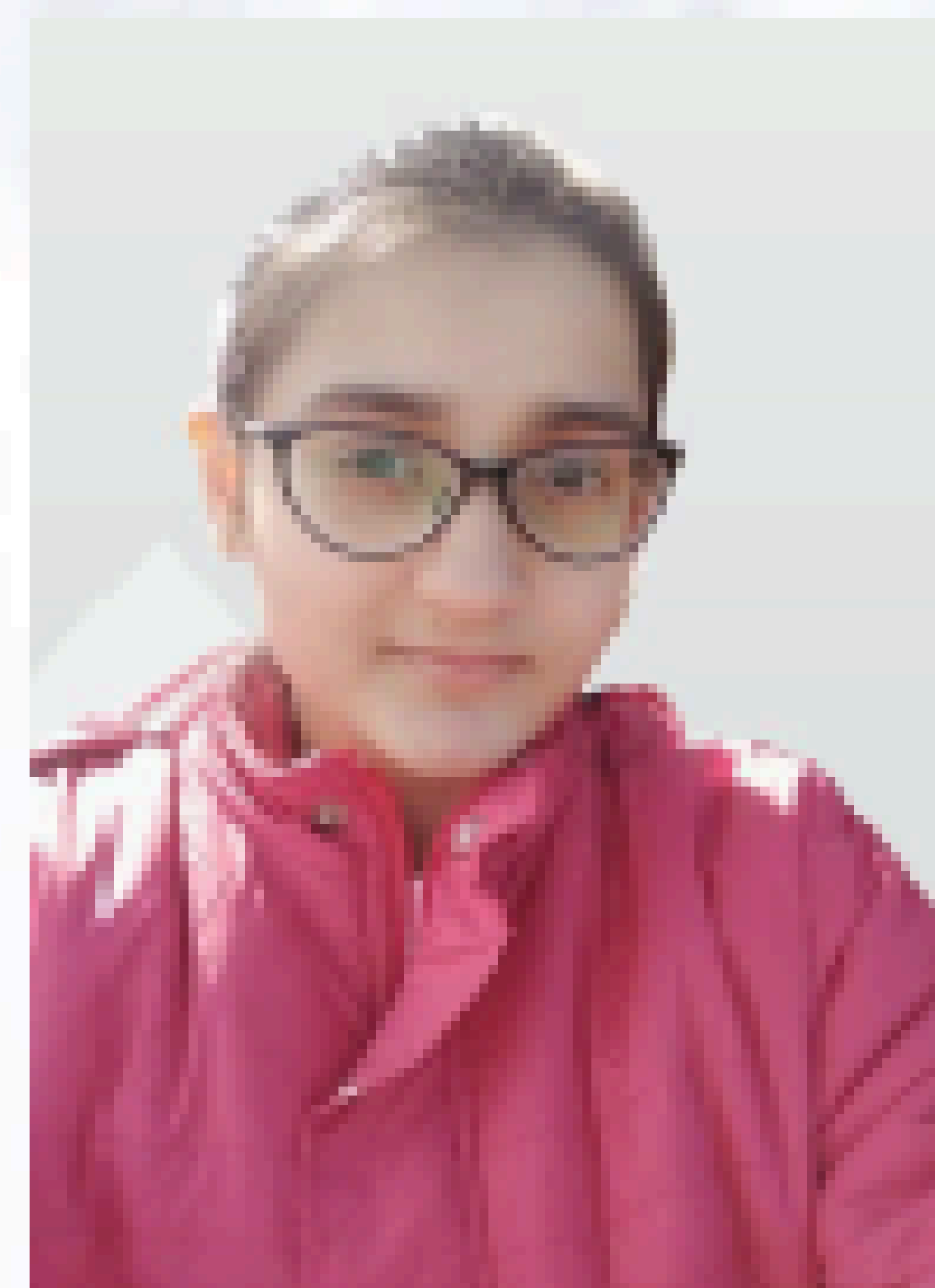
**Tanya Sharma**  
Capgemini  
3.8 lacs p.a.



**Nitin**  
Infosys  
6.25 lacs p.a.



**Avinash**  
Infosys  
3.6 lacs p.a.



**Aanchal**  
TCS  
3.36 lacs p.a.



**Agha Hettich**  
3.0 lacs p.a.



**Priyesh Arya**  
Capgemini  
3.8 lacs p.a.



# WEB 3.0

The internet is arguably the most important technology revolution in the history of humankind.

Although the industry has evolved considerably since its inception, its current stage is akin to the auto industry in 1920 — that is, it's world-changing technology that has been around for 20 years but is still relatively immature and in need of major improvements.

Tim Berners-Lee's internet was to be "a collaborative medium, a place where we [could] all meet and read and write." An interconnected computer system designed for scientists to share experiments was soon dominated by AOL, CompuServe, early Yahoo and other portals. These online service providers were the gateway to Web 1.0, where businesses, individuals and governments began to consume and occasionally post content. Netscape launched its web browser in 1994, prompting the dot-com explosion, and the browser wars began.

Unlike Web 1.0 where, according to Graham Cormode and Balachander Krishnamurthy, "content creators were few ... with the vast majority of users simply acting as consumers of content,"

Web 2.0 brought us the "'Web as Platform,' where software applications are built upon the Web as opposed to upon the desktop," according to John Battelle and Tim O'Reilly.

This enabled masses of users to participate in content creation on social networks, blogs, sharing sites and more. Search engines and social media platforms driven by user-generated content disrupted the media, advertising and retail industries. As a result, giant companies in retail and publishing that did not adapt have died or are struggling to stay alive.

Web 2.0's business model relies on user participation to create fresh content and profile data to be sold to third parties for marketing purposes. Indeed, the internet has become a massive app store, dominated by centralized apps from Google, Facebook and Amazon, where everyone is trying to build an audience, collect data and monetize that data through targeted advertising. In my opinion, the centralization and exploitation of data, and the use of it without users' meaningful consent, is built into Web 2.0's business model.

### *So What is WEB 3.0?*

Five years ago, it was thought that the next generation of the internet would be the Semantic Web. Berners-Lee coined the term to describe a web in which machines would process content in a humanlike way (i.e., a "Global Brain" where all data would be connected and understood both contextually and conceptually).

The Semantic Web did not materialize for a number of reasons. The primary reason was that the real AI technology, referred to as RDF (resource description framework), was nearly impossible to implement. How can a machine know the difference between a jaguar (the animal) and a Jaguar (the car)? The only way to know the difference is to understand the context in which it is being described.

Connecting concepts and building taxonomies for every word are monumentally difficult tasks. So difficult that despite IBM's Watson spending billions to advance this technology, it never truly came to fruition.

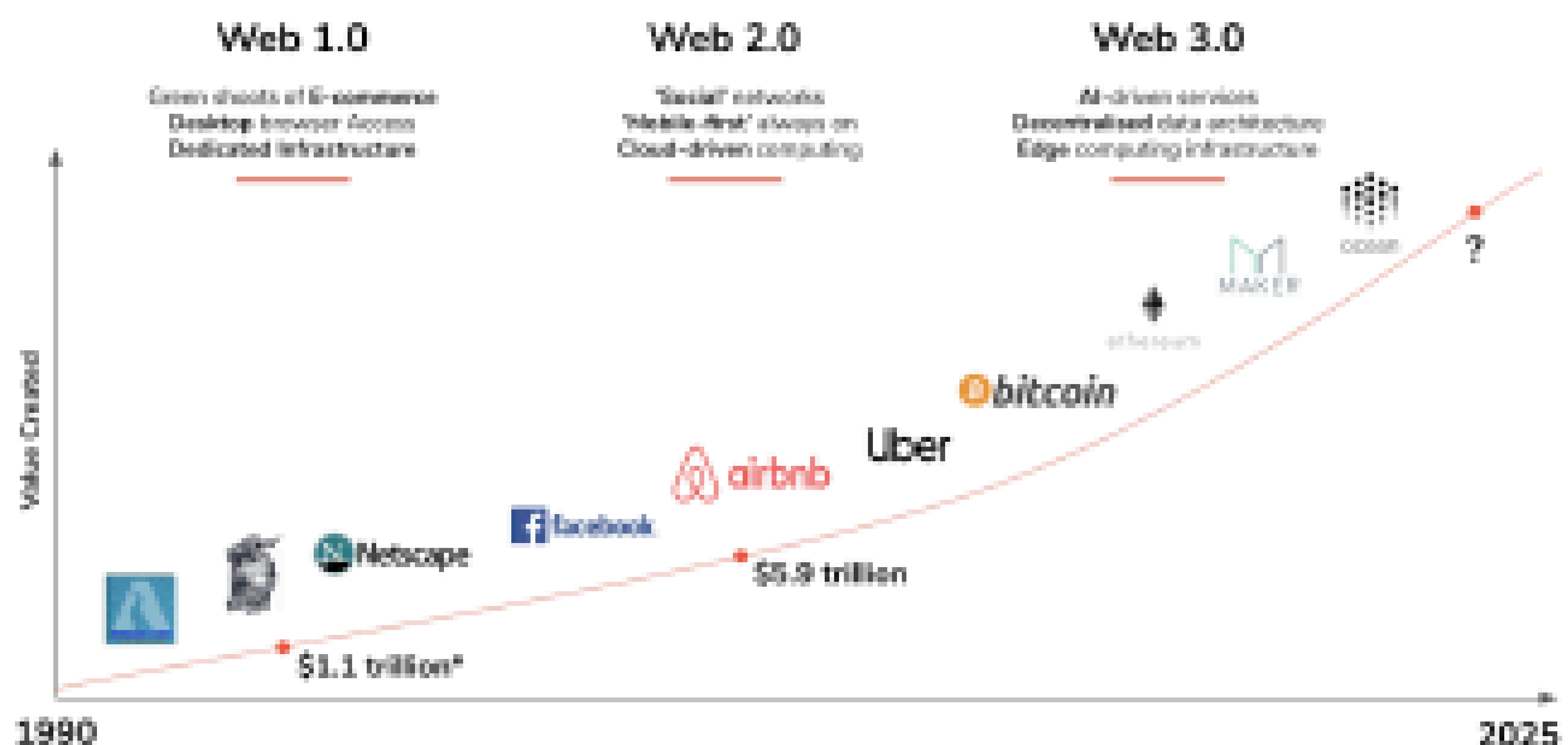
Although not the Semantic Web envisioned by Berners-Lee, Web 3.0 is in many ways a return to his original web, where "no permission is needed from a central authority to post anything ... there is no central controlling node, and so no single point of failure ... and no "kill switch"!

The rise of technologies such as distributed ledgers and storage on blockchain will allow for data decentralization and create a transparent and secure environment, overtaking Web 2.0's centralization, surveillance and exploitative advertising. Decentralized infrastructure and application platforms will displace centralized tech giants, and individuals will be able to rightfully own their data.

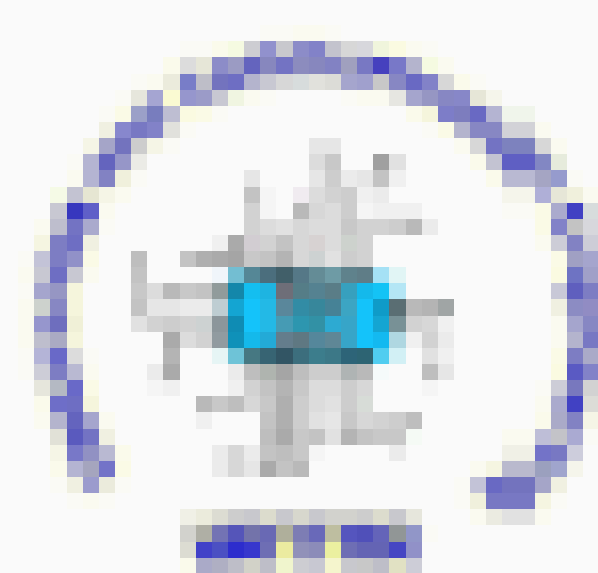
Indeed, one of the most significant implications of decentralization and blockchain technology is in the area of data ownership and compensation. As we move toward Web 3.0 and the technologies that support it mature and become scalable.

In sum, Web 3.0 will bring us a fairer internet by enabling the individual to be a sovereign. True sovereignty implies owning and being able to control who profits from one's time and information. Web 3.0's decentralized blockchain protocol will enable individuals to connect to an internet where they can own and be properly compensated for their time and data, eclipsing an exploitative and unjust web, where giant, centralized repositories are the only ones that own and profit from it.

## The Evolution of the Web



# Webinar: How to write research paper



**PANIPAT INSTITUTE OF  
ENGINEERING AND TECHNOLOGY**

Department of Electronics and Communication Engineering  
presents webinar on

## How To Write A Research Paper Of A Project

Compulsary to attend by all students of ECE department.



October 18, 2021

11:30 am to 12:30 pm

Mode: Online (MS Teams)

**FACULTY COORDINATORS:-**

Dr. Monika Gambhir

Ms. Sapna Arora

Department of Electronics and Communication Engineering, PIET,  
organized webinar on How to write a research paper of a Project on  
12 October, 2021

### **OBJECTIVE**

- To create an awareness on the importance of writing and publishing articles.
- How to access institutional IEEE Xplore access

Total 43 students attended the webinar.

The event was successfully organized by faculties of ECE Dept., PIET :

Dr. Monika Gambhir

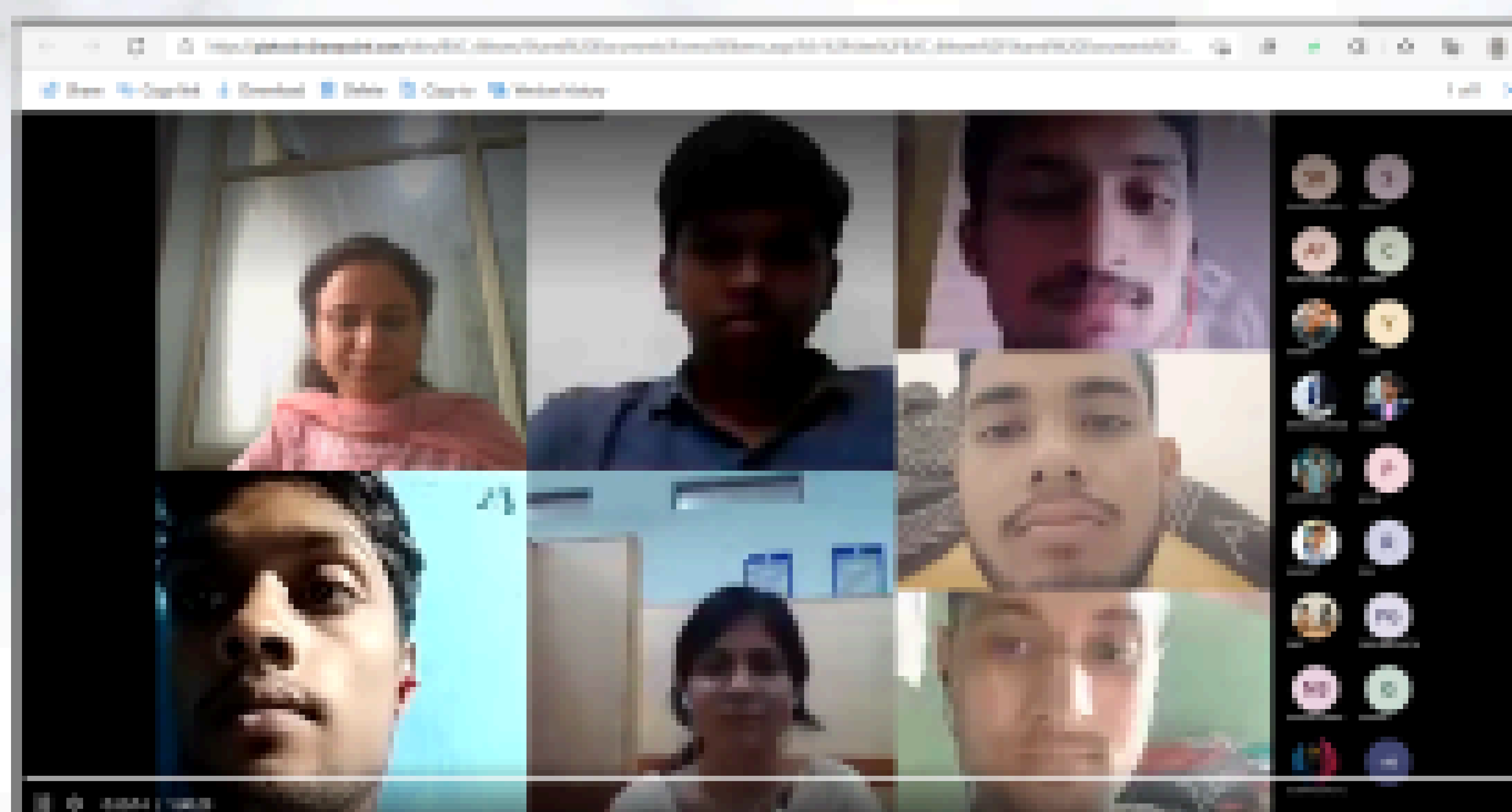
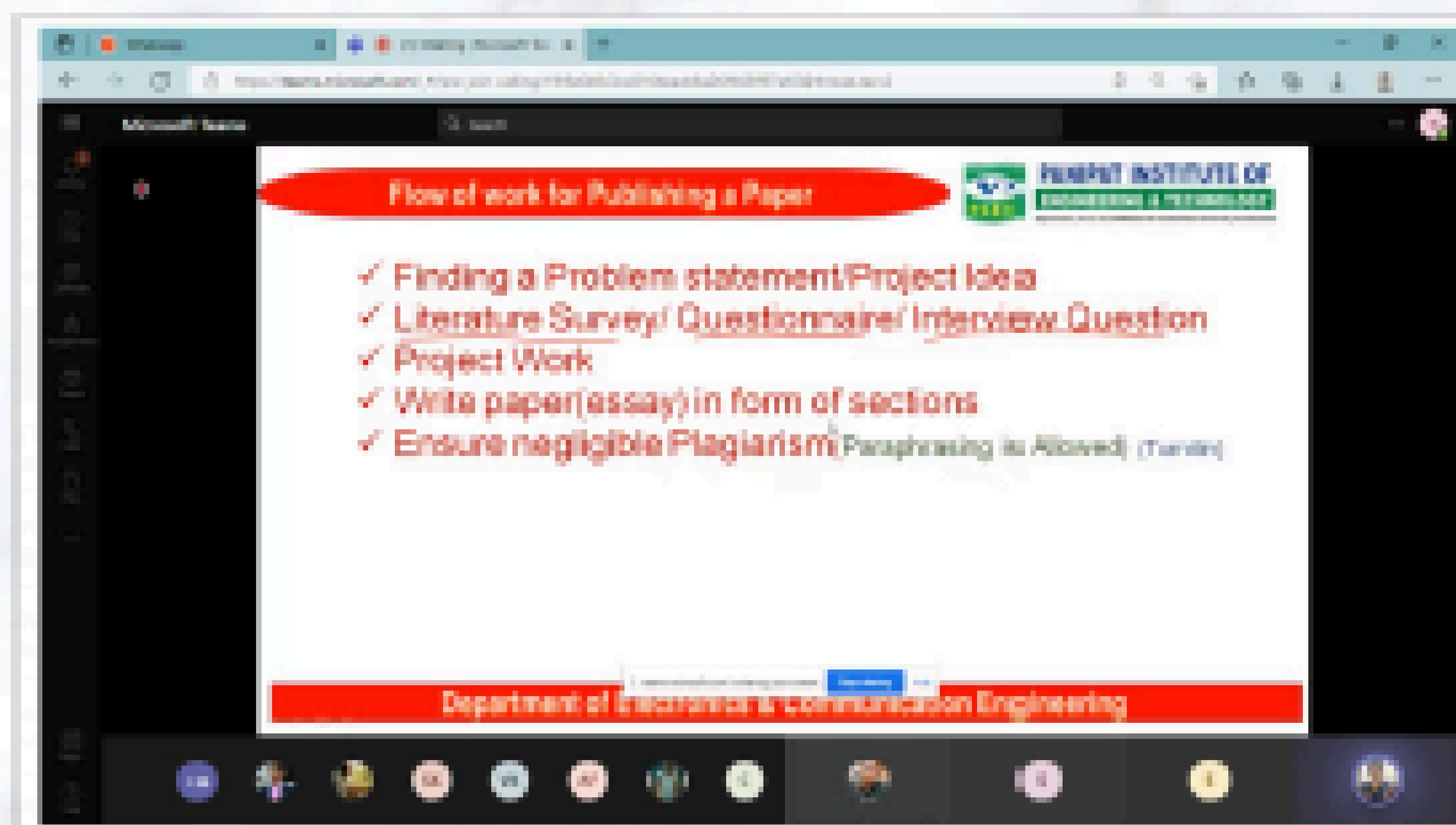
Ms. Sapna Arora

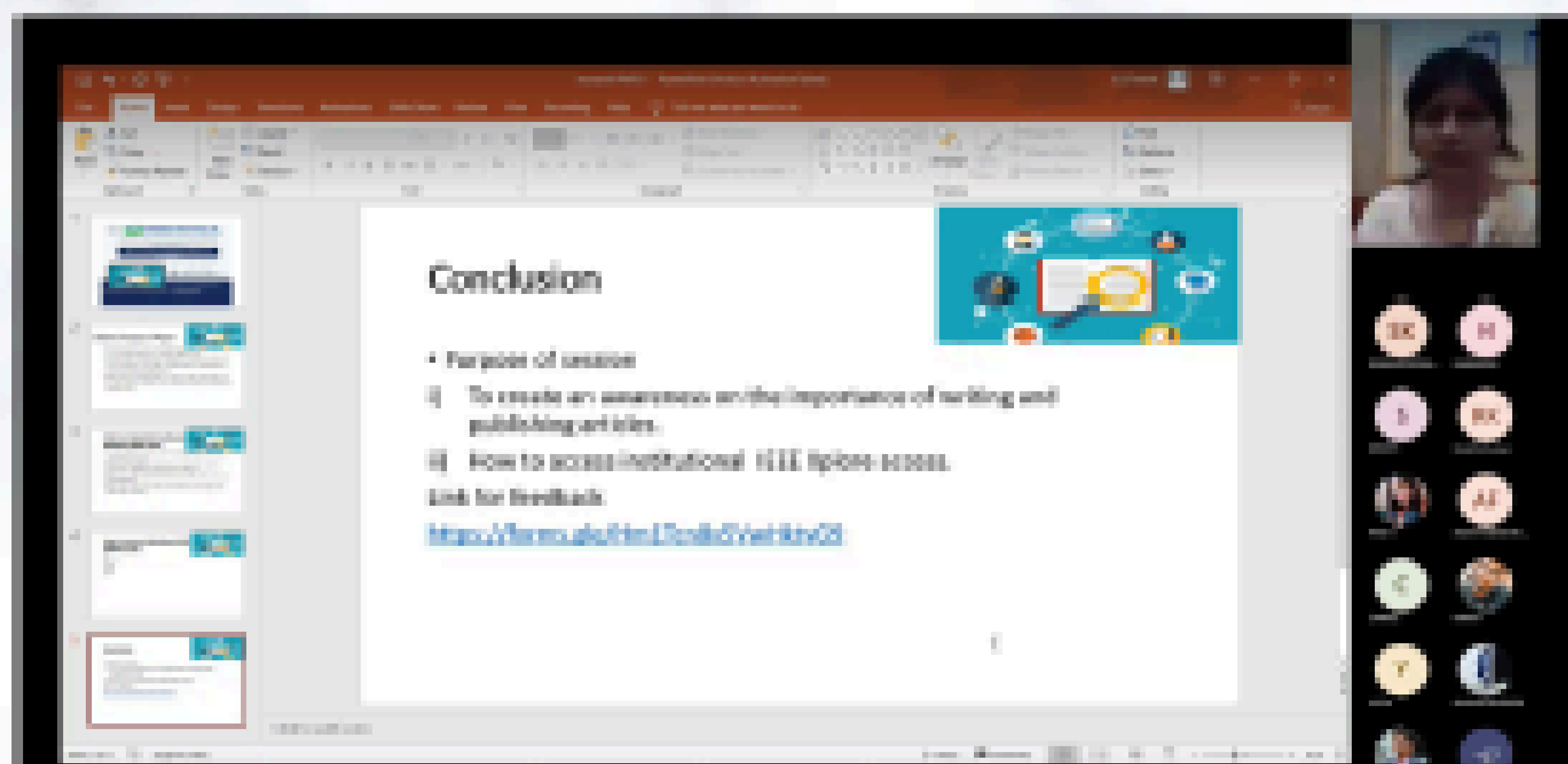
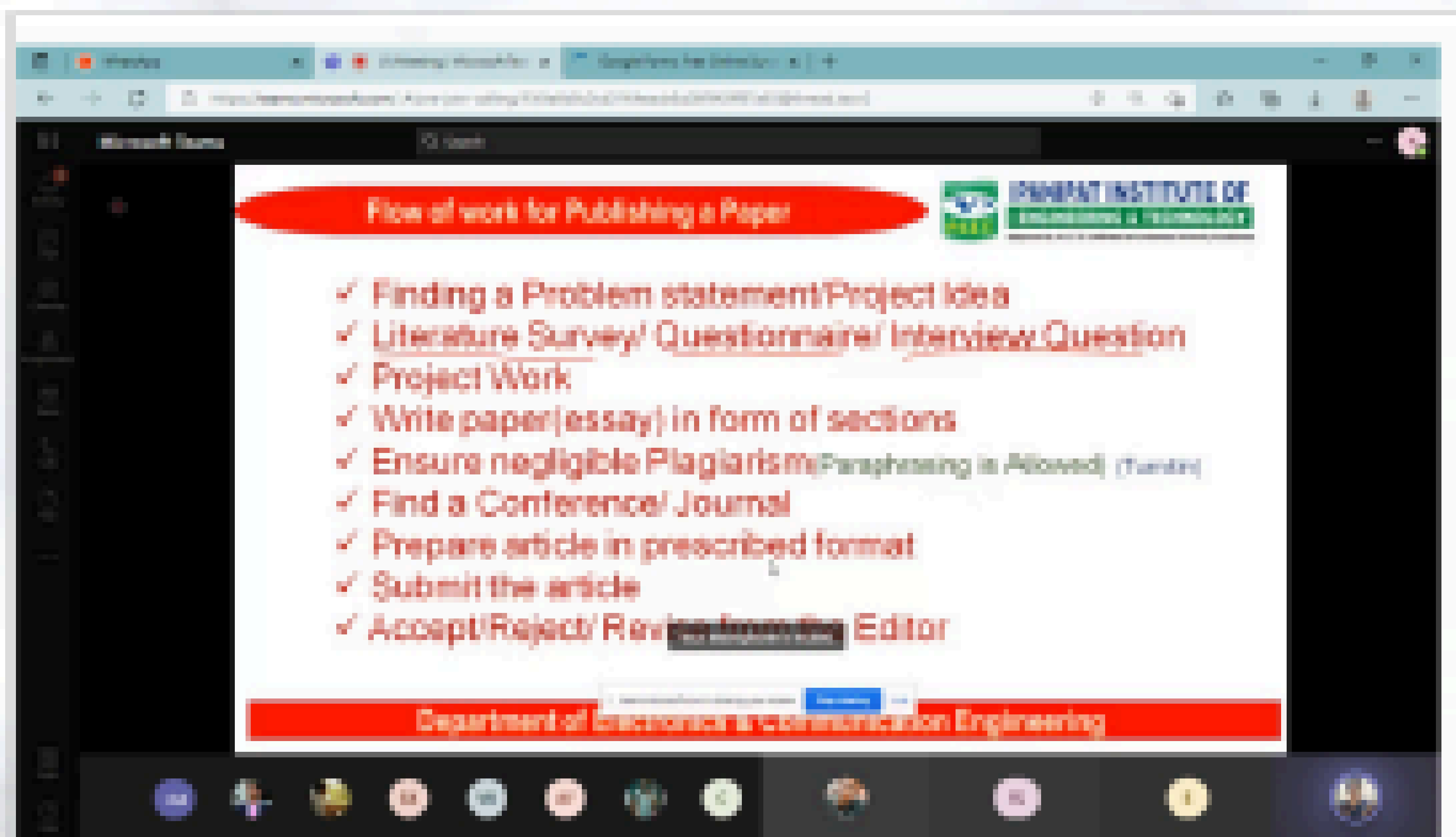
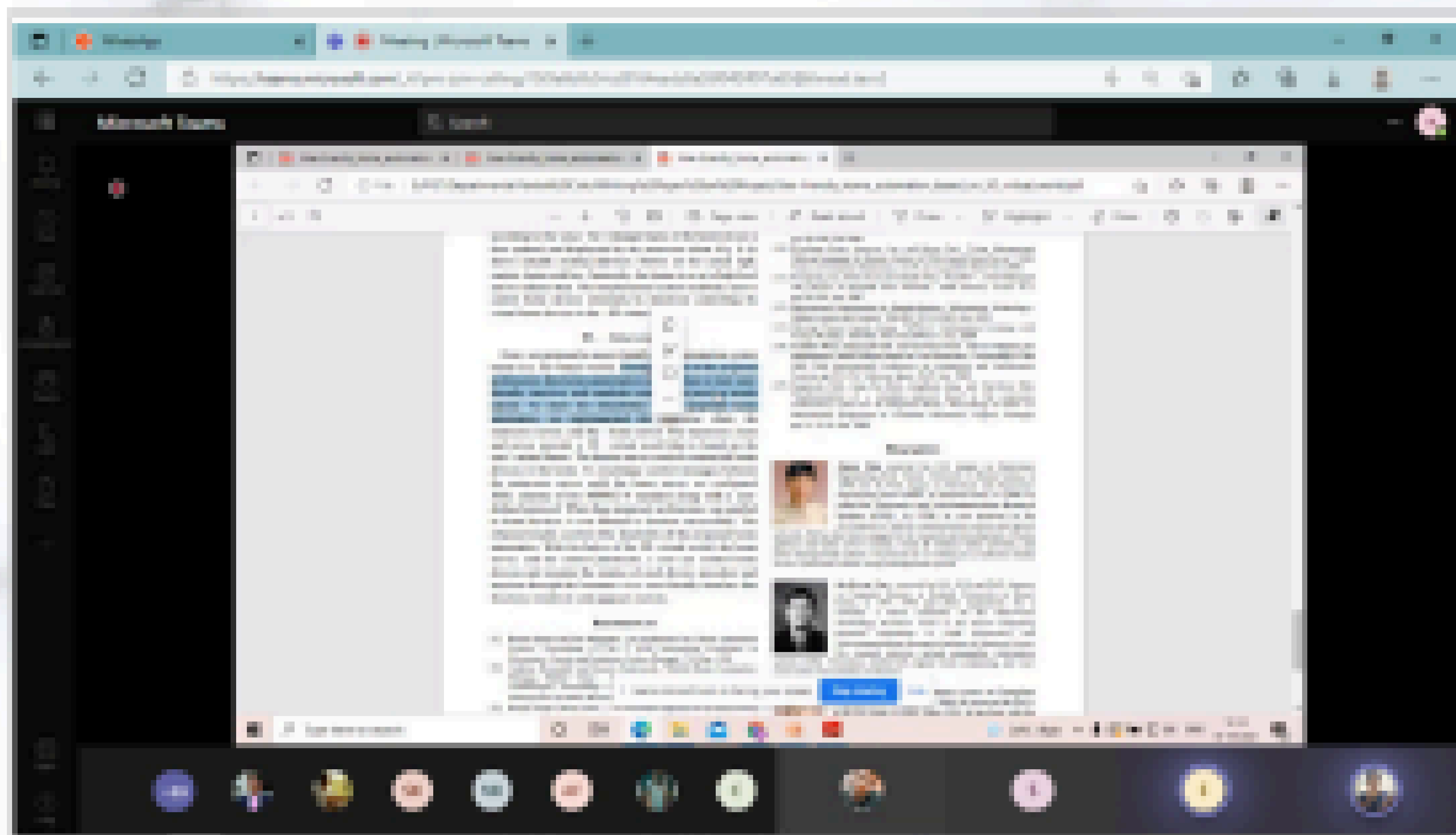
Student coordinators :

Himanshu (B.Tech ECE 3rd yr)

Rishabh Jain (B.Tech ECE 3rd yr)

## Glimpse of the event





# IETE Membership



Students of ECE department became members of IETE society in October 2022. The Institution of Electronics and Telecommunication Engineers (IETE) is India's leading recognised professional society devoted to the advancement of Science and Technology of Electronics, Telecommunication & IT. Founded in 1953. The IETE is the National Apex Professional body of Electronics and Telecommunication, Computer Science and IT Professionals.

It serves more than 1,25,000 members (including Corporate, Student and ISF members) through various 63 Centres, spread all over India and abroad. The Institution provides leadership in Scientific and Technical areas of direct importance to the national development and economy. Government of India has recognised IETE as a Scientific and Industrial Research Organization (SIRO) and also notified as an educational institution of national eminence. The objectives of IETE focus on advancing electro-technology.

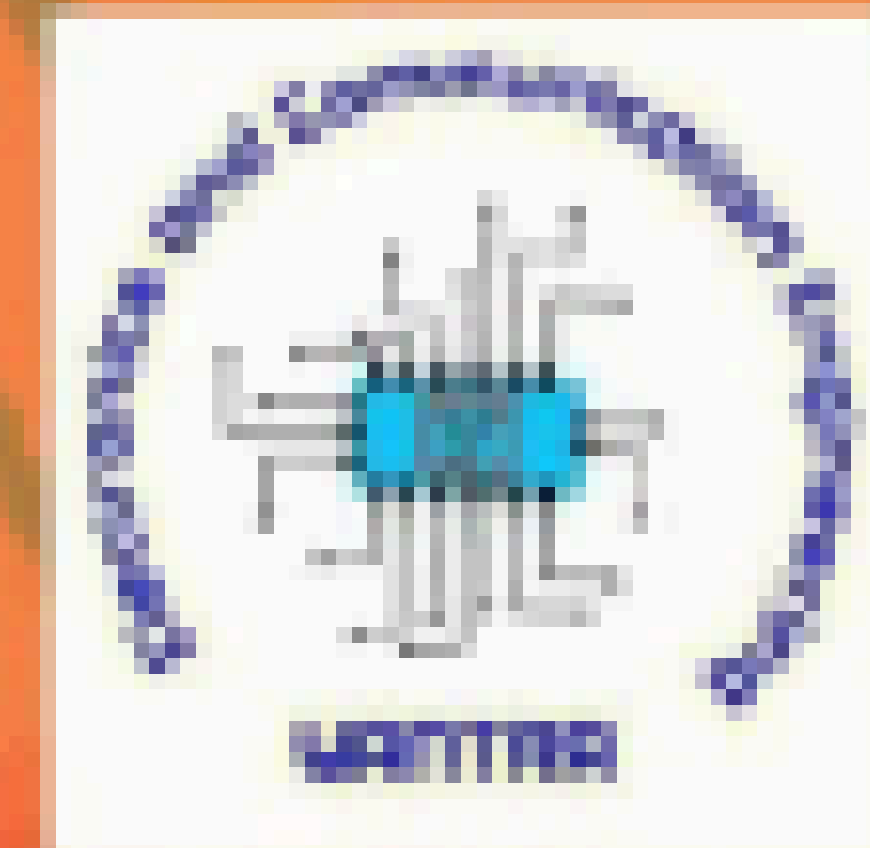
The IETE conducts and sponsors technical meetings, conferences, symposia, and exhibitions all over India, publishes technical journals and provides continuing education as well as career advancement opportunities to its members.

# Diya Decoration and Toran making competition



PANIPAT INSTITUTE OF  
ENGINEERING & TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Kurukshetra University, Kurukshetra



YANTRA CLUB of ECE Department

Organising

DIYA decoration &  
TORAN making Competition

📅 28<sup>th</sup> October, 2021

🕒 2:00 pm

📍 B block, First floor

## Rules:

1. Individual entry is allowed.
2. 1 hour will be given for each event.
3. Bring your own material.
4. Participation fee: ₹20

## Faculty Coordinators:

1. Ms. Sapna Arora: 8053921818
2. Mr. Sachin Dhawan: 9034870919
3. Mr. Arun Rana: 8950183659



Scan to register

Diwali is a symbol of Hope for human kind. This festival is known as the 'festival of lights'. To celebrate this day Department of Electronics and Communication Engineering, PIET, Yantra club organized diya decoration and Toran making competition on 28 Oct , 2021.



Total 11 students from various departments participated in the events and showcased their creativity skills through diya decoration and Toran making. Dr. Tanvi, HOD Civil department and Dr. Sonu A.P, DMS judged this event and also shared their valuable feedback for individual students. The event was successfully organized by

Faculties of ECE Dept., PIET :

Ms. Sapna Arora, Mr.Sachin Dhawan and Mr. Arun Rana

Student coordinators :

Gunjan (B.Tech ECE 2nd yr) Neeraj (B.Tech ECE 2nd yr)

## *Glimpse of the event*





# SPEECH COMPETITION

**PANIPAT INSTITUTE OF ENGINEERING & TECHNOLOGY**  
Approved by AICTE & Affiliated to Kurukshetra University, Kurukshetra

**INTERNATIONAL HUMAN RIGHTS DAY**

Yantra Club, ECE department is celebrating Human Rights Day on December 9, 2021. To mark this day we are organising a **Speech Competition**

**Rules for Speech competition:**

1. Participants has to prepare 4-5 slides on this theme
2. Maximum Time to deliver speech is 3-4 minutes
3. Student can deliver individually or in group of two students in English.
4. Judgement will be done on the basis of Fluency, Body Language, content of speech.

**Faculty Coordinators**  
Ms Sapna Arora  
Mr Arun Rana  
Mr Sachin Dhawan

**Venue: B-101**  
**Time: 2p.m-4p.m**

**Event Coordinator**  
Himanshu (7982081655)

Carva

**"All Human Beings Are Born Free & Equal in Dignity and Rights"** mentioned in Article 1-Universal Declaration of Human Rights. To celebrate this day Department of Electronics and Communication Engineering, PIET, Yantra club organized speech competition on 9 December, 2021.

## **OBJECTIVE**

- i) To create an awareness on Human Rights among the students
- ii) To improve public speaking skills.

**Dr. Akhilesh Mishra ,HOD, Department of Management Studies shared his views on this day.**

**Total 8 students from ECE department participated in the events and share their ideas through presentation. Ms.Geetanjli Papreja A.P, ASH department and Dr. Sakshi A.P,PIET NCR college judged this event and also shared their valuable feedback for individual students. The event was successfully organized by faculties of ECE Dept., PIET :**

**Ms, Sapna Arora    Mr.Sachin Dhawan**

**Student coordinators :**


**Himanshu (B.Tech ECE 3rd yr)    Riya (B.Tech ECE 3rd yr)**

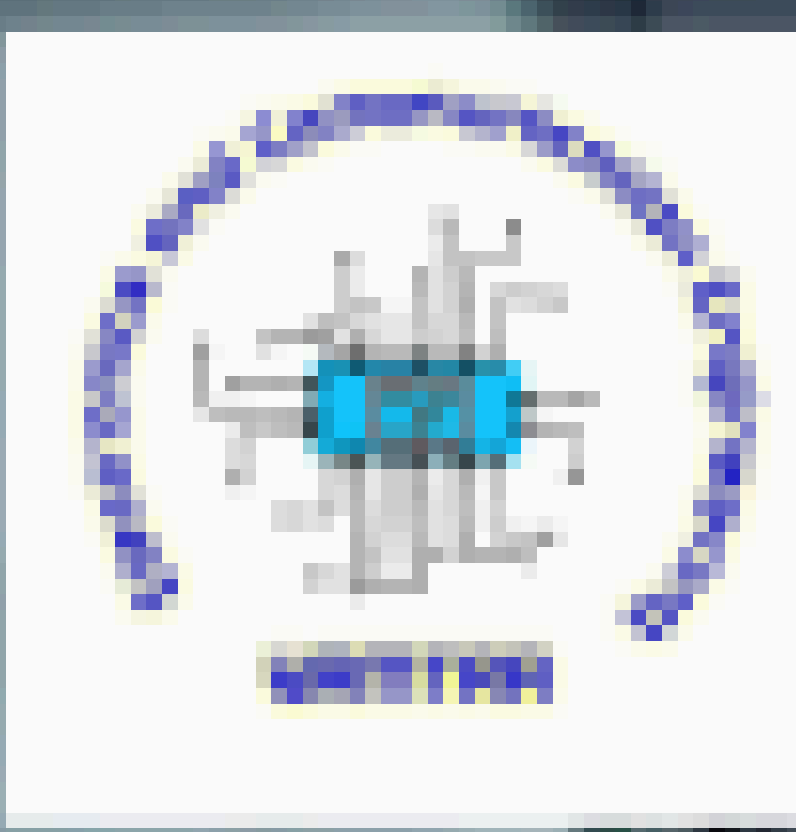



*Glimpse of  
the event*



# IOT WORKSHOP



YANTRA CLUB OF ECE DEPARTMENT IS ORGANISING

## IOT WORKSHOP

(FOR 2ND YEAR)

**SPEAKER:- Mr. Arun Rana**

<u>Time and Date</u>	<u>Venue</u>
December 13, 2021 9:00 AM	B BLOCK ROOM NO. 101

## OBJECTIVES:

This workshop was aimed to impart knowledge amongst the students about basics Operation, Maintenance and frequent use in IOT lab.

The workshop also focused on various methods and modes of getting accurate results from different parameters.

The workshop started with welcome note by Ms. Swati Gupta (H.O.D), ECE, Director of the institute Dr. Shakti Kumar awarded the certificates to the students on completion of the workshop.

## **OUTCOME:**

By successfully attending this activity, participants will be able to:

- Correct usage of the available kits.
- Efficient use in number of projects.
- Help students to correlate various application of IOT with home automation and other applications.

## **LIST OF EXPERIMENTS AS PER CURRICULUM**

- Study and Install IDE of Arduino and different types of Arduino.
- Write program using Arduino IDE for Blink LED.
- Write Program for RGB LED using Arduino.
- Study the Temperature sensor and Write Program for monitor temperature using Arduino.
- Study and Install Python in Eclipse and WAP for data types in python.
- Write a Program for arithmetic operation in Python.
- Write a Program for looping statement in Python.

# *Glimpse of the event*







# ARTICLE

## Geofencing and location-based services

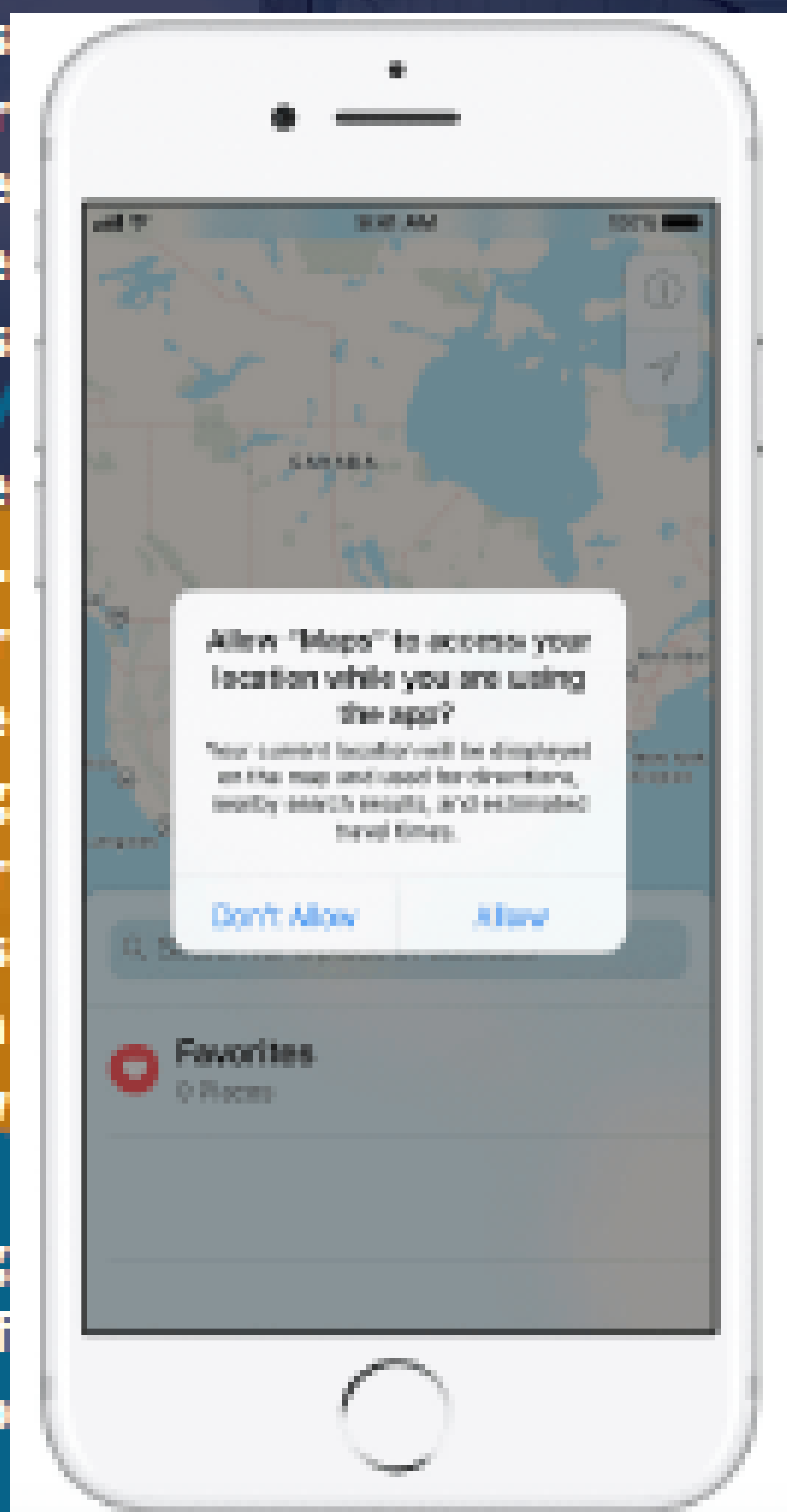
It's no secret that mobile apps are tracking the location of their users. In fact, users are giving them permission to do so.

Whenever you download and use a new app, you'll get a notification that requests permission to access your location. Here's an example of what this notification looks like on iOS

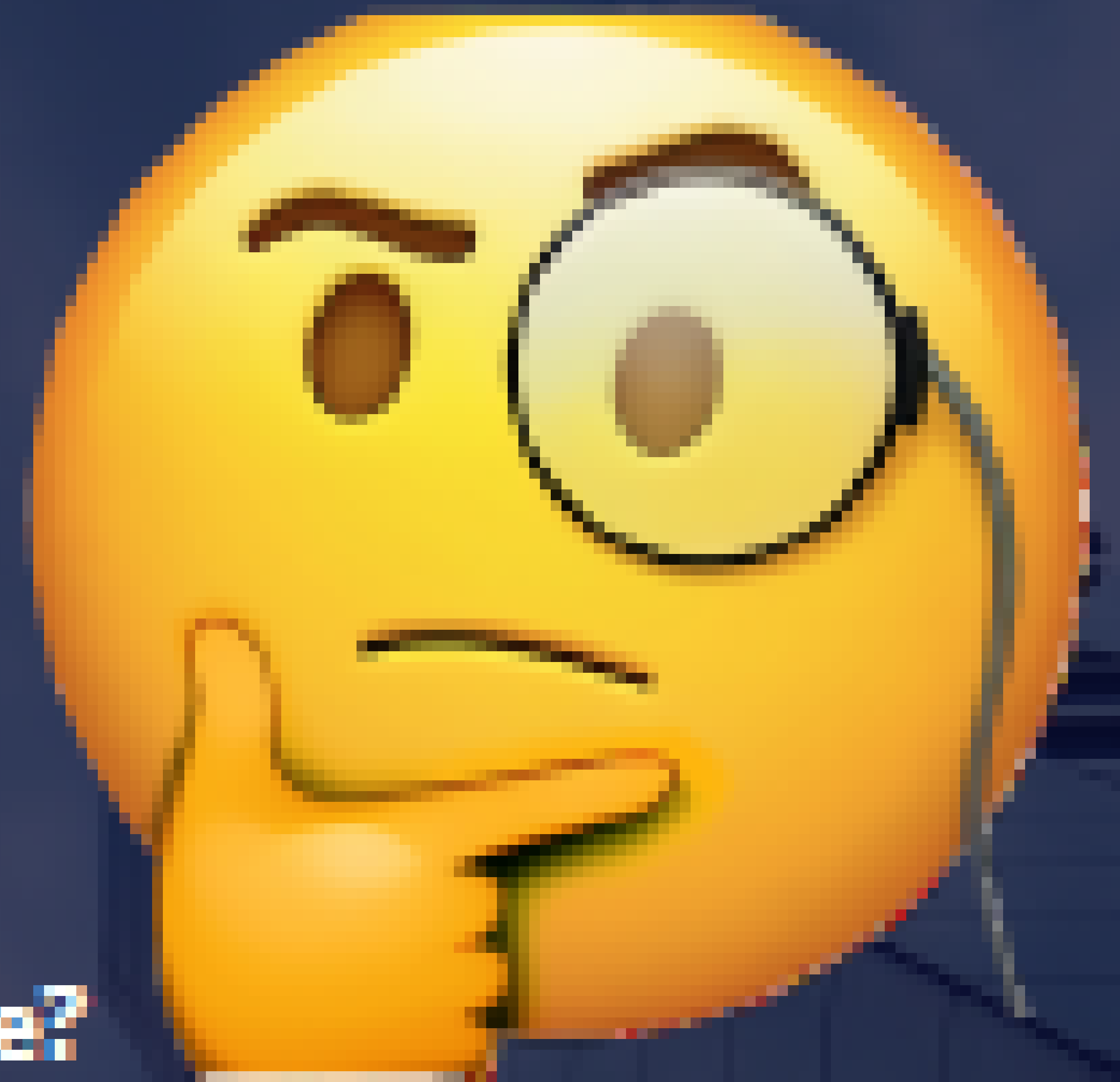
Devices. You can't even use some apps unless you share your location with them. For example, if you're using a rideshare app like Uber or Lyft, you won't be able to get connected with a driver unless the app knows exactly where you are.

But now location-based services are trending in a new direction. Companies that don't need your location are still requesting it. They are using it to improve their marketing efforts. In fact, 70% of apps share user data with third-party services. It's easier to target users from a marketing perspective if you know their location.

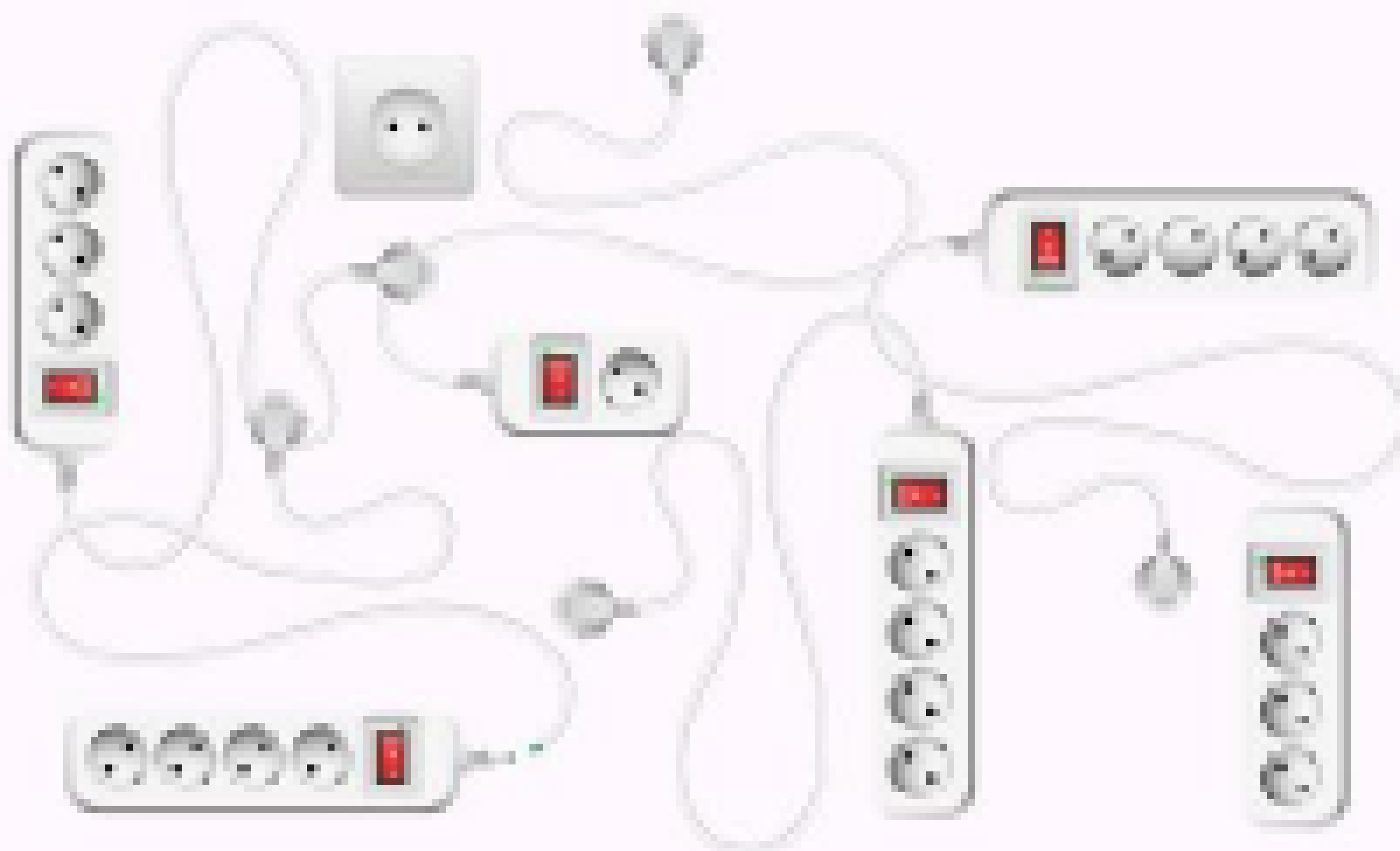
For example, businesses are using geofencing to make more money. If someone with an app downloaded to their device walks into a certain geofenced area, they'll get a push notification from the app with some kind of promotion based on that location. We're going to see an increase in this type of marketing strategy in 2022.



# FOR THE READER



How many phones can be charged at once?



FIND OUT HOW MANY PHONES  
CAN BE CHARGED SIMULTANEOUSLY?

# TECH ARCHITECT 5.0



**PANIPAT INSTITUTE OF ENGINEERING & TECHNOLOGY**  
Approved by AICTE & Affiliated to Kurukshetra University, Kurukshetra

**KANTRA CLUB IITM ORGANISED**

**TECH ARCHITECT 5.0**

**TECHNICAL PRESENTATION COMPETITION**

On 16th March, 2022  
11:00 A.M. onwards

**Rules:**

- Student can choose any topic on emerging technologies.
- Individual entry is allowed.
- Students have to present with slides.
- Maximum 8 minutes will be given for presentation.
- Judgement will be on the basis of communication skills, technical knowledge, Presentation.

**Faculty Coordinators**

- Mr. Anam Jaisa
- Mr. Sachin Chavhan
- Ms. Sapna Arora

**Student Coordinators**

- Himanshu (1900041000)
- Gunjan (1900041040)

Department of Electronics and Communication Engineering, PIET, in association with IETE conducted Tech Architect 5.0 technical presentation competition on March 16, 2022.

The purpose of the event was to make students aware with the theme of self and family protection from covid-19, Women Empowerment and Green environment.

Many students of different department PIET College participated in it and came up with tremendous ideas based on Tech Architect 5.0.

The respected judge from Academia

Ø Dr. Dinesh Verma (MCA)

Ø Dr. Shakti Arora (CSE)

Ø Mr. Ratan Deep (IT)

The young minds who secured position were:

Ø 1st position –Ruchi (DMS)

Ø 2nd Position- Tiya (IT Department)

Ø 3rd Position-Kunal (ECE Department)

The event was successfully organized by faculties of ECE Dept., PIET :

Prof. Sachin Dhawan

Prof. Arun Rana

Prof. Sapna Arora

And the active members of Yantra Club, ECE and Student coordinators:

Gujan (B.Tech ECE 2ndyr)

Himanshu(B.Tech ECE 3rdyr)

With warm regards,

Yantra Club, ECE

# Glimpse of the event



# DID YOU KNOW ??

1. The word engineer comes from a Latin word meaning 'cleverness'.
2. The fastest passenger train in the world is the Shanghai Maglev with a maximum operational speed of 267 mph.
3. The largest wind turbine in the world is in Denmark. It is 720 feet tall, has 260-foot blades, and can generate 8 megawatts of power (enough to supply electricity for 3,000 American homes).
4. The snowboard was invented by an engineer. Serman Poppen invented a toy for his daughter by tying two skis together and attaching a rope to one end. This invention called the "snurfer" eventually evolved into the snowboard. With some engineering twists and turns along the way, the snowboard has become a marvel of geometry, chemistry, and biomechanics.
5. According to Moore's Law, microchips double in power every 18 to 24 months. Gordon E. Moore, a founder of Intel, proposed the concept in 1965.
6. Big Brutus is the second largest electric shovel in the world. The electric shovel constructed in 1963 took more than 150 railroad cars and over a year to build. It is 160 feet tall and operates at 15,000 horsepower. The shovel had to be shut down in 1974 because the cost of operation was twice that of the value of coal it recovered.

# Session on CV writing

The Electronics and Communication Department organized a highly informative session on "How to Build a Good Resume" on **April 8 2022**, in B101. It aimed at preparing students for future interviews and career opportunities. **Dr. Vikas Tyagi**, an esteemed faculty member from the Department of Management Studies guided learners through the intricacies of crafting an effective resume.

Dr. Tyagi emphasized that a resume is a crucial document, akin to a blueprint for one's career. An excellent resume has the potential to unlock numerous doors of opportunity.



  **PANIPAT INSTITUTE OF ENGINEERING & TECHNOLOGY**  
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**DEPARTMENT OF ECE IS ORGANISING**

**INTERACTIVE SESSION ON CV WRITING**

**SPEAKER**

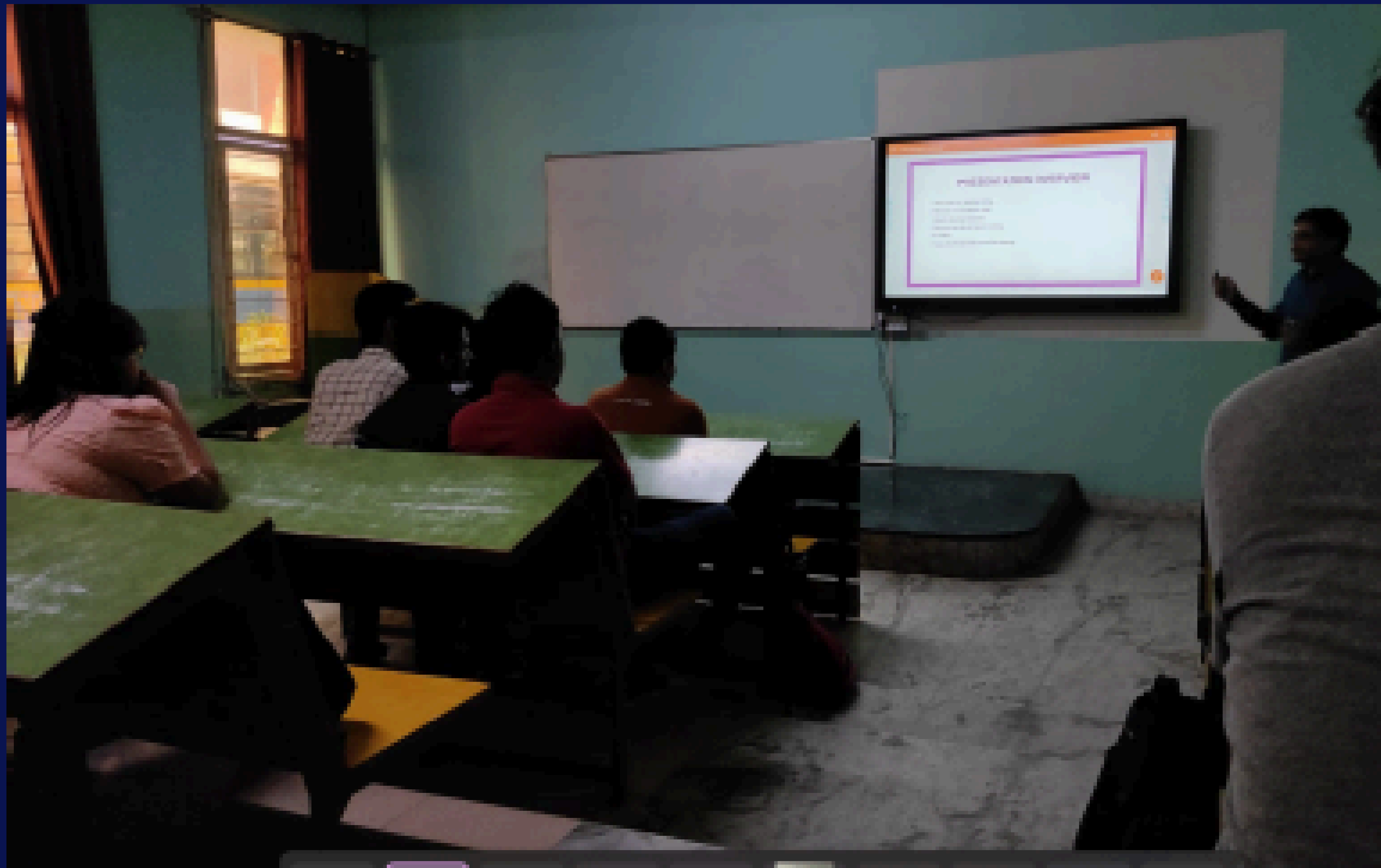
**DR. VIKAS TYAGI**  
DEPARTMENT OF MANAGEMENT STUDIES

**FRIDAY, APRIL 8**  
**VENUE :- B-101**  
**TIME :- 11:45 AM**

Mandatory to attend by all students of ECE

# Glipmses from the event





# PCB designing and Fabrication Worskhop

The workshop on "Introduction to PCB Design, Terminologies, and Electronics Components" from **April 18 - 22 ,2022** in IDEA lab that aimed to provide participants with a comprehensive understanding of printed circuit board (PCB) design, essential terminologies, and various electronic components. The trainers **Mr. Rajeev Dhandha** and **Mr. Ishant Kumar** conducted hands-on sessions using Eagle software facilitated practical learning experiences in schematic and board layout design.

**PANIPAT INSTITUTE OF ENGINEERING & TECHNOLOGY**  
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**PIET IDEA Lab**

**INSTITUTION'S INNOVATION COUNCIL**  
(Ministry of HRD, Government of India)

**AICTE**  
Approved Institute

**PIET IDEA Lab**  
Presents

**PCB DESIGNING AND FABRICATION USING EAGLE SOFTWARE**

**TRAINERS**

**Mr. Rajeev Dhandha**

**Mr. Ishant Kumar**

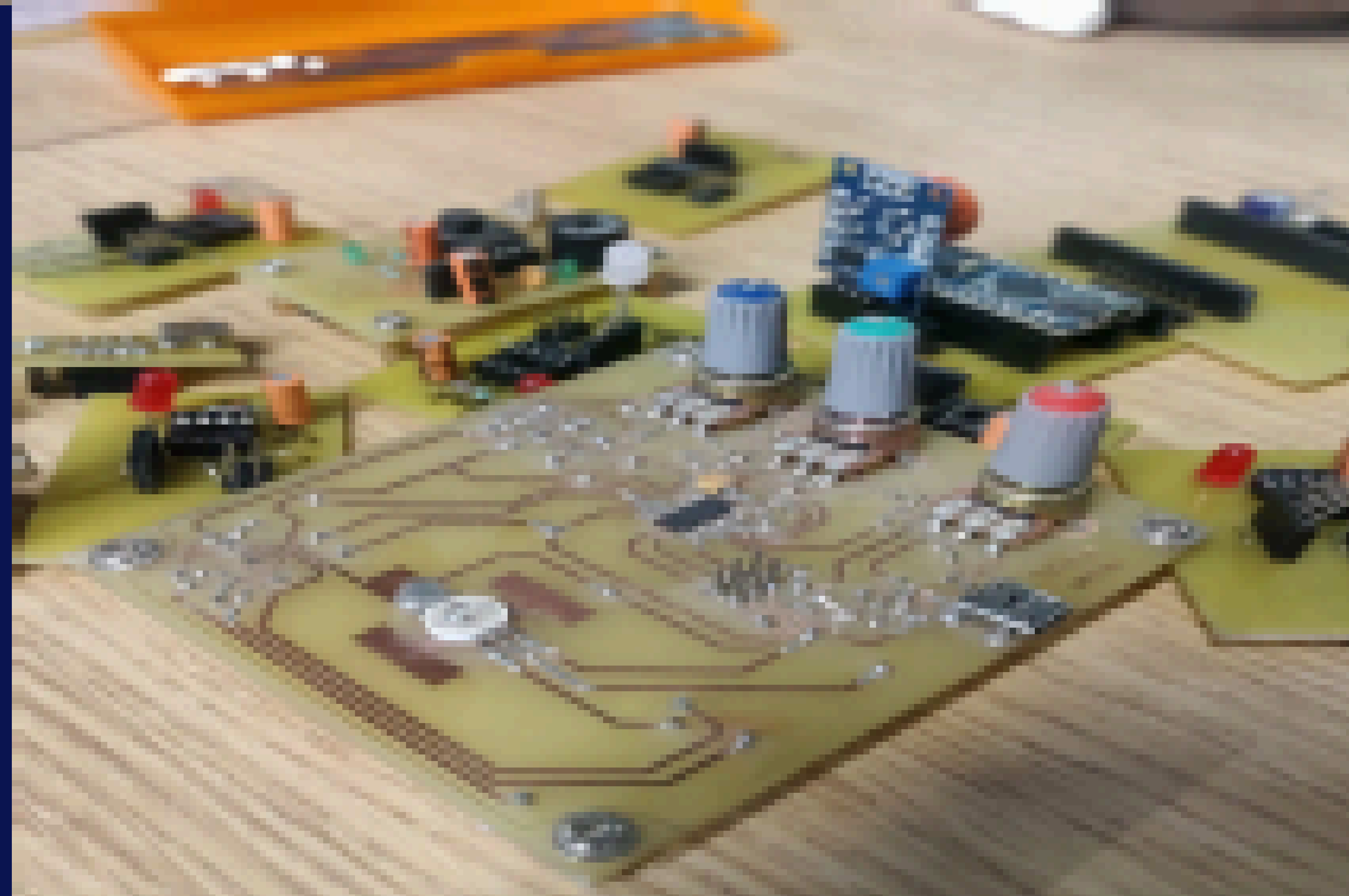
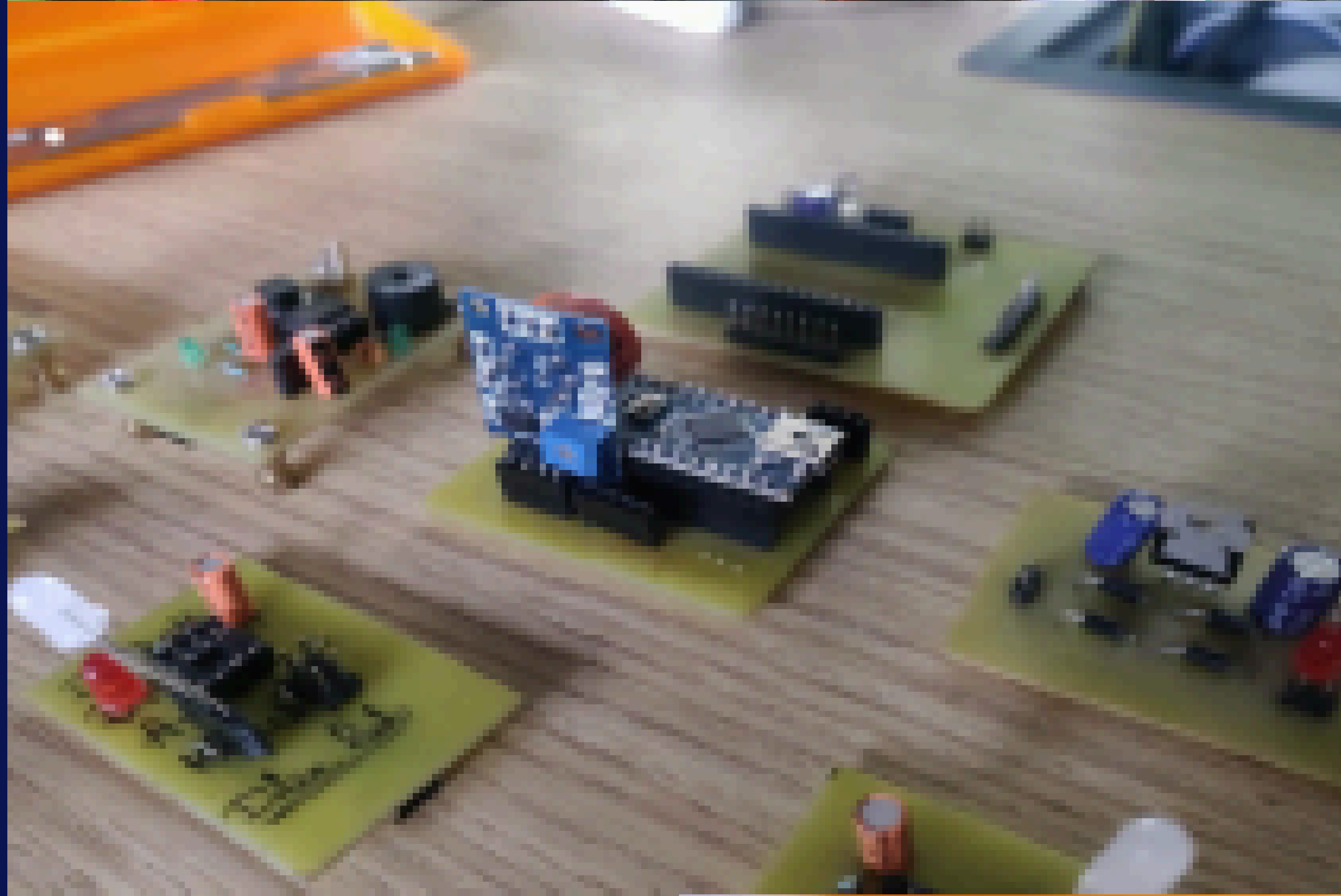
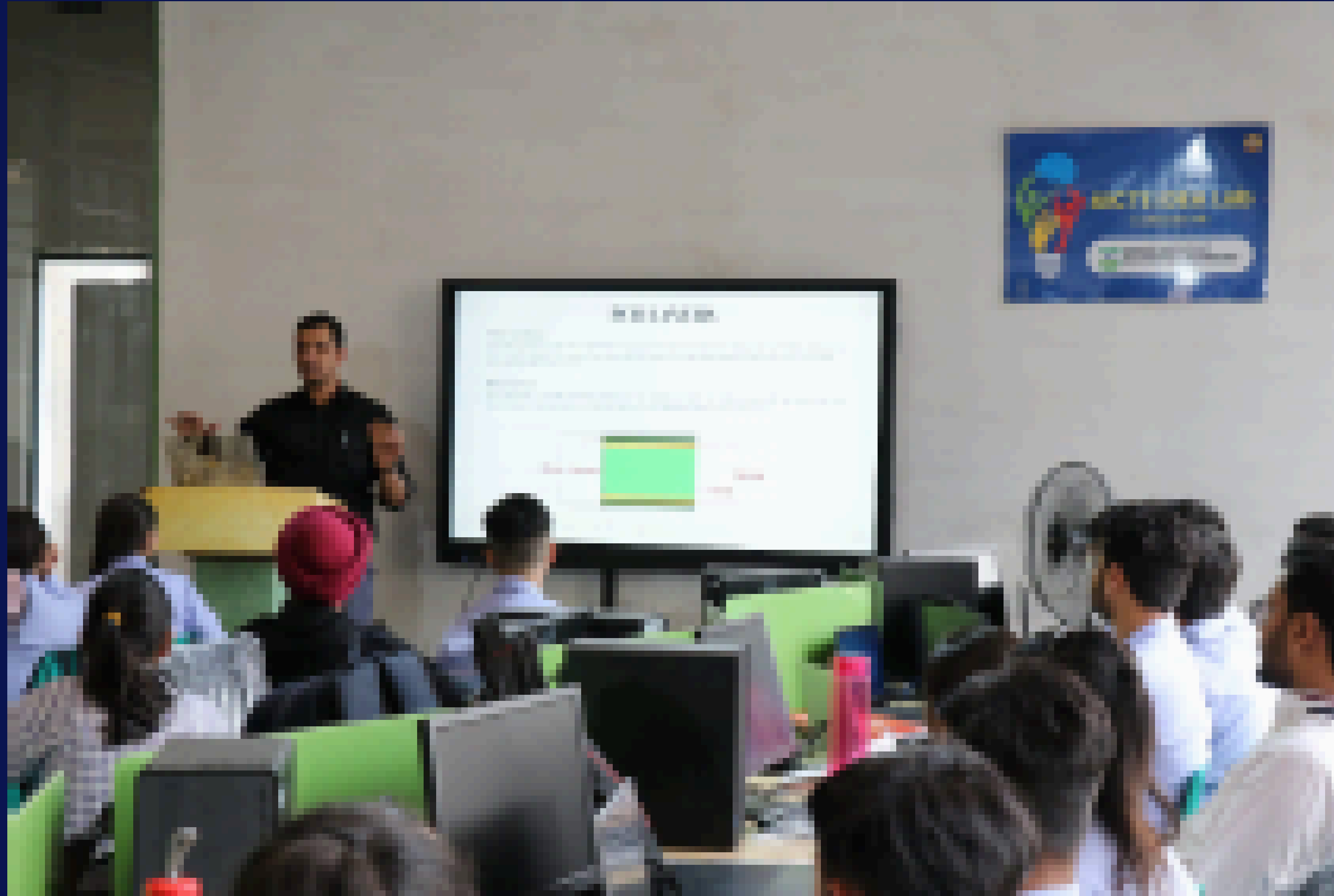
**18-22 APRIL, 2022**

**VENUE: PIET IDEA LAB**

**PARTICIPANTS: 3<sup>RD</sup> YEAR ECE STUDENTS**

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
UNIVERSITY OF PANIPAT

# Glimpses from the event:



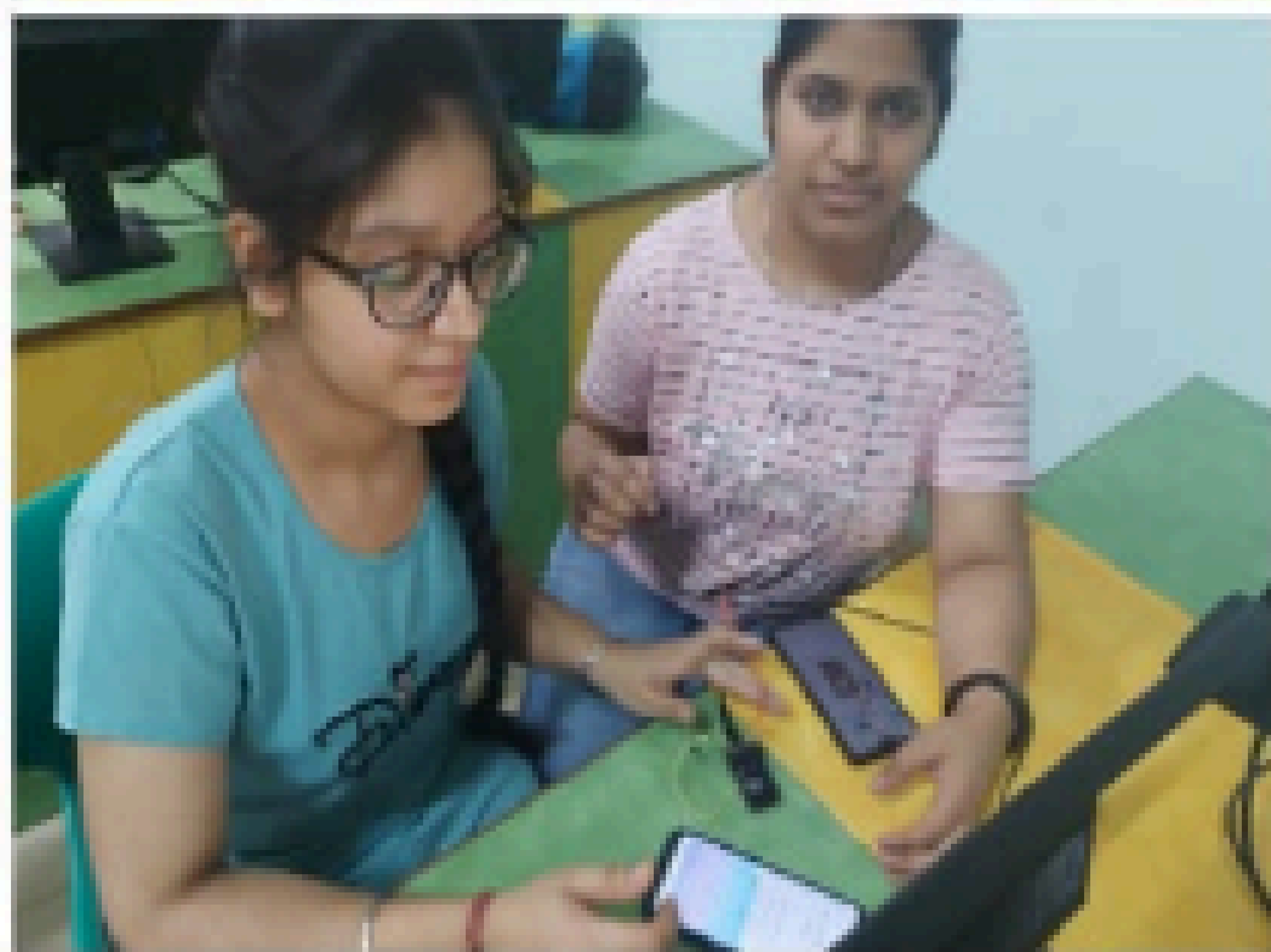
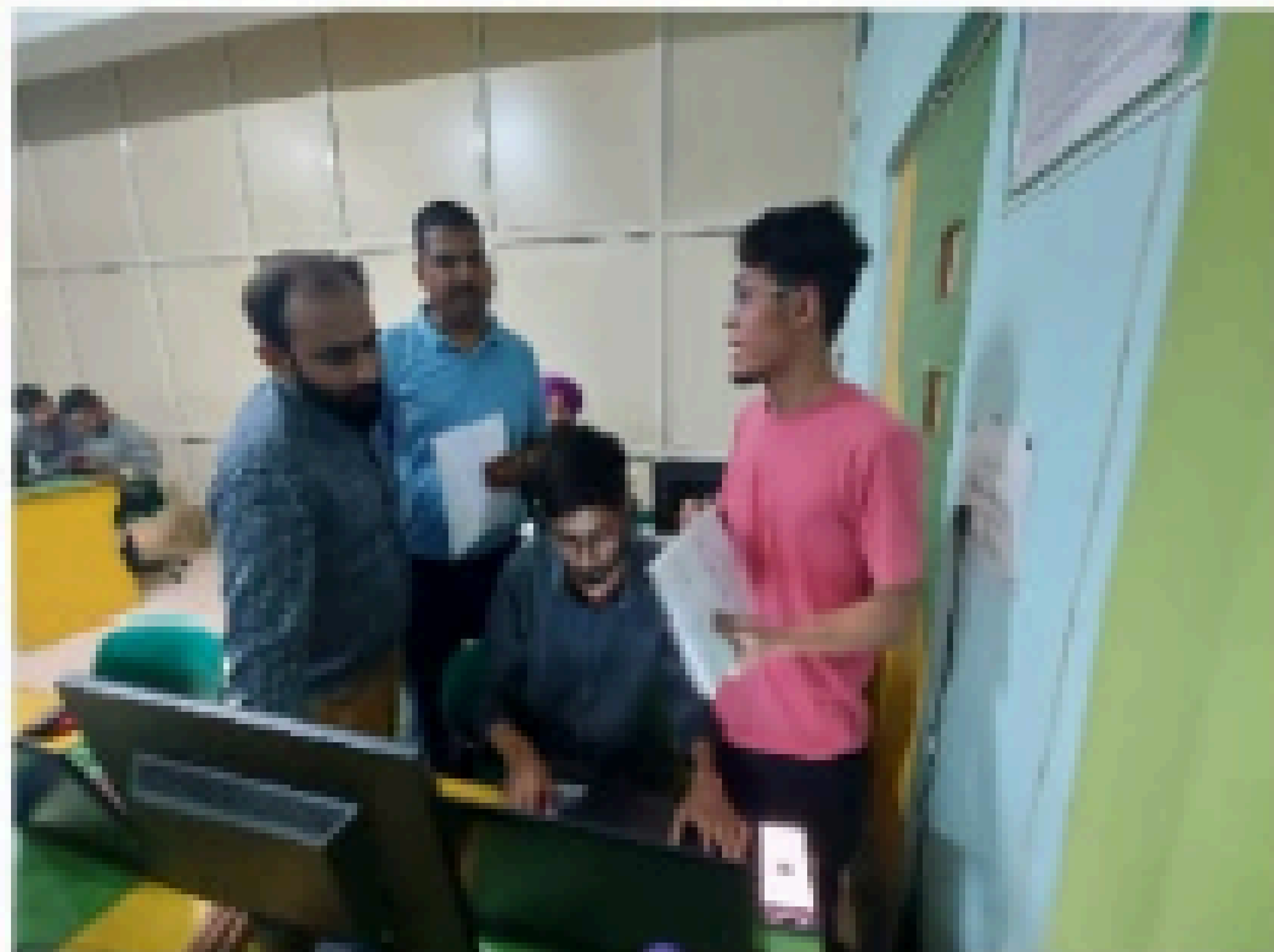
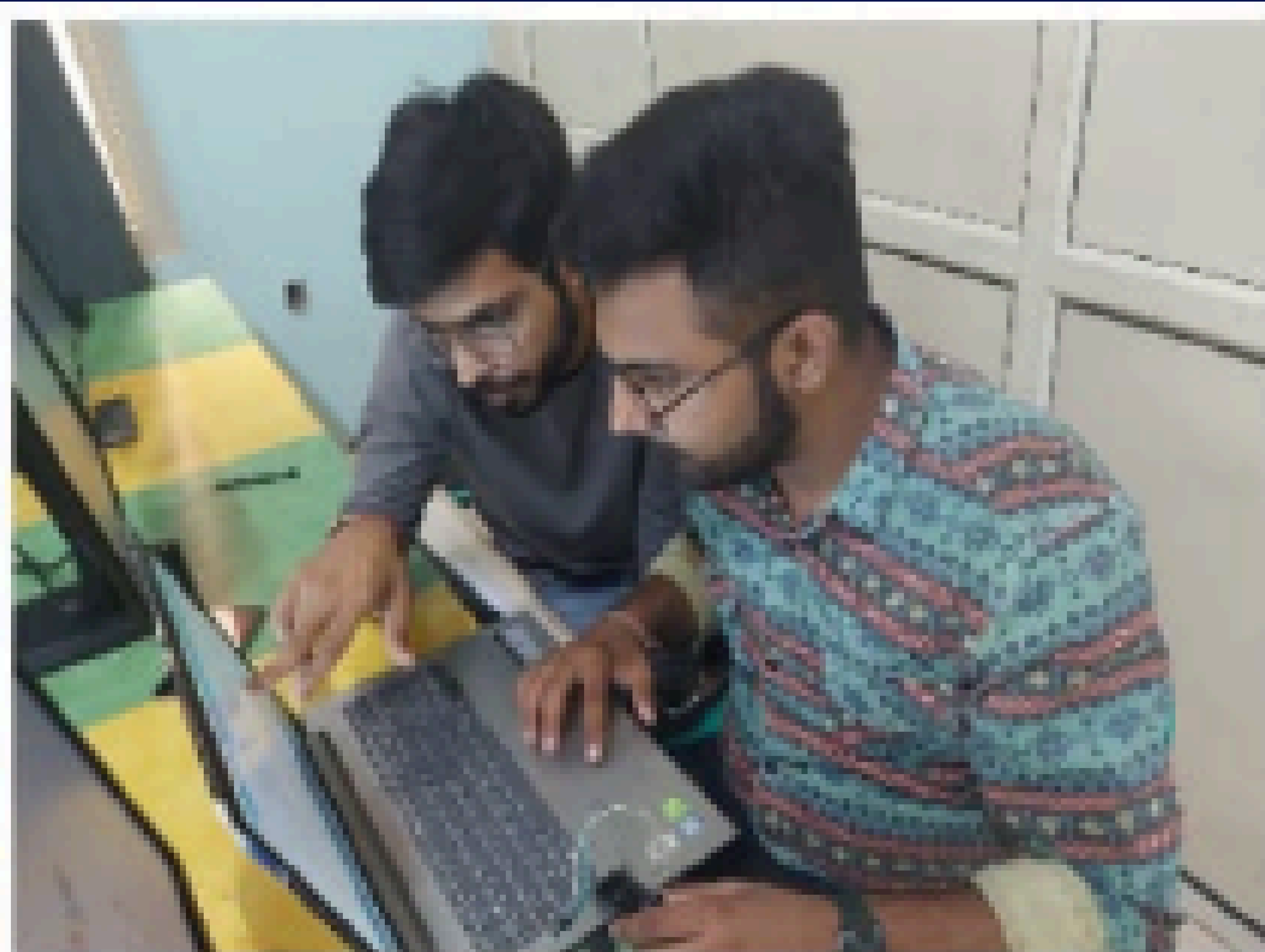
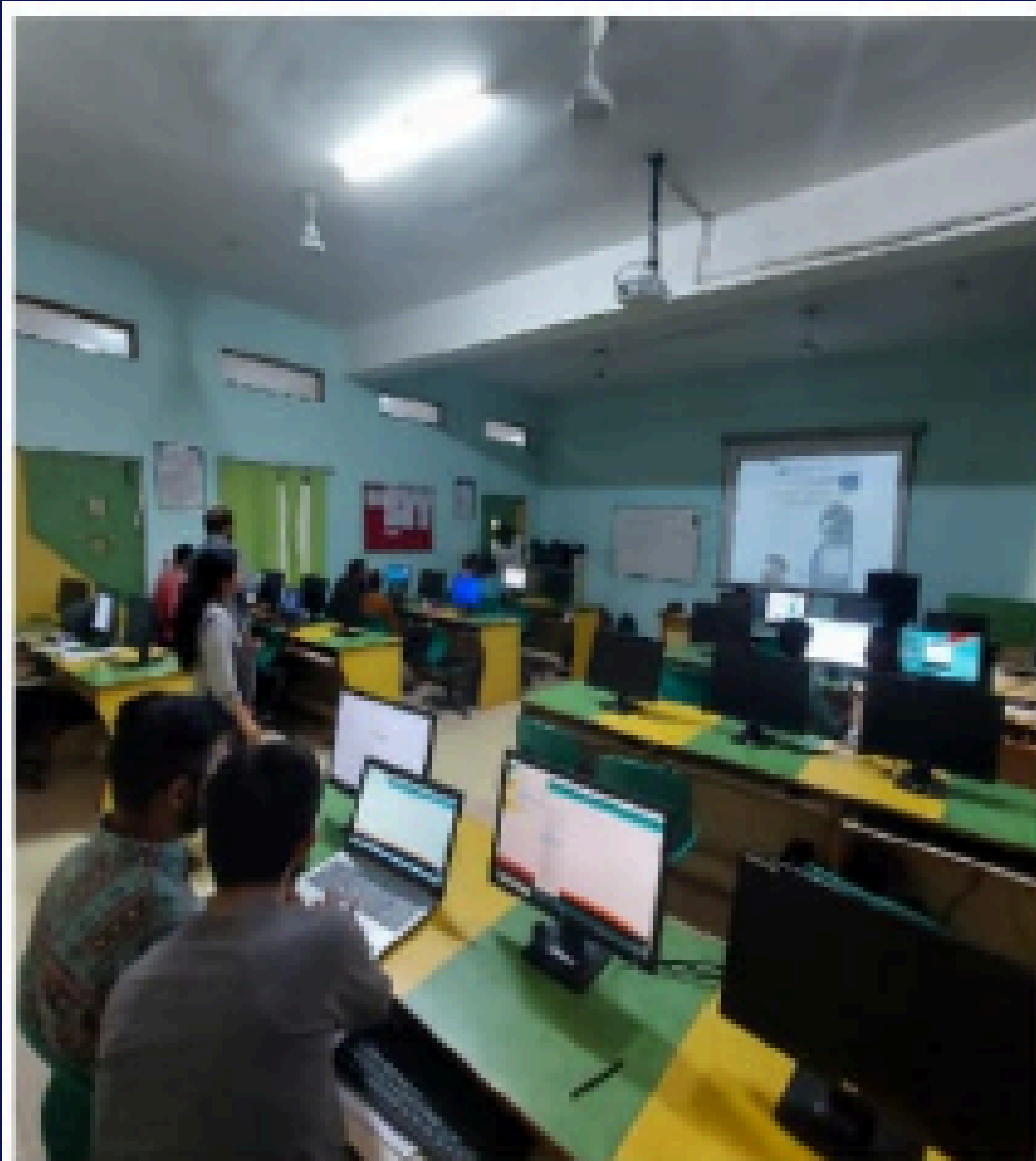
# Circuit Junkies

Circuit Junkies 2.0 was organized by **Yantra club**, ECE dept. P.I.E.T on **25 April 2022** in B-204. Total 14 teams from ECE department participated in this event. The event was conducted in two rounds. In preliminary round a quiz having 25 multiple choice questions was shared through google form. Students were asked to submit the quiz in 10 minutes.

For second round 5 teams were shortlisted. One problem based on IOT was given to students and Students were asked to implement the problem through node MCU in 30 minutes.

Three teams were selected by judges for first, second and third positions based on accuracy of output and presentation.

# Glimpses from the event:



## Robotrix 3.0

The two-day skill development workshop, ROBOTRIX 3.0 was conducted from **29 - 30 April 2022**, by **Mr. Abhisak Sharma** and technical support **Mr. Satpal Singh**, that focused on the "Role of Digital Manufacturing in Fabrication of Robotic Parts" was successfully conducted by the Robo Club, Department of Mechanical Engineering. The workshop aimed to equip B.Tech. students with practical knowledge and skills in utilizing CNC machines such as CNC laser cutting and 3-D printing for robotic parts fabrication.

Each day of the workshop consisted of three sessions conducted by Mr. Abhisak Sharma. The sessions focused on training students on 3-D modeling software, specifically "CATIA," where students learned different tools and techniques for modeling robotic parts. Hands-on sessions were also conducted, providing students with practical experience.

# Glimpses from the event:

