KG REDDY College of Engineering & Technology

KG Reddy College of Engineering & Technology

(Approved by AICTE, New Delhi, Affiliated to JNTUH, Hyderabad)

Chilkur (Village), Moinabad (Mandal), R. R Dist, TS-501504

Report

On

"A Four Week Foundation on Internet of Things"

As a part of

Emerging Technology course

Under

Engineering for Sustainable Development Program

26/02/2021 to 19/03/2021

Organized by

IoT CLUB

IoT Club, Department of Electronics and Communication Engineering

In association with

H&S Department

At

KG Reddy College of Engineering & Technology

Submitted by

Mr. Angotu Saida, Assistant professor,

Dept. of Electronics and Communication Engineering

Head of the Department

Head of the Department
Humanities & Science
K.G. Reddy College of Engg. & Tech.
Chilkur, Moinabad, R.R. Dist. T.S.

Principal

Principal
KG Reddy College of Engineering & Technology
Chilkur (V), Moinabad (M).
R.R.Dist., Telangana

KG REDDY College of Engineering & Technology

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1. Course introduction

Course Name: A Four Week Foundation Course on Internet of Things

Course duration: 4 - weeks

Organized Department: Institutions Innovation Council

Collaborations:H & S dept., Center for Innovation and Social Transformation

Course offered by – Data Science club, dept. of Computer Science and Engineering.

Venue: T-405 ECE classRoomKG Reddy College of Engineering and Technology, Hyderabad

Coordinator: Mr.Angotu Saida, Asst. Prof., Dept. of Electronica and Communication Engineering, KGRH

Resources Persons:

1. Mr. Angotu Saida
2. M r. M N Narsaiah
3. Mr. Vijaya Bhasker Reddy
4. Mr. D. Lakshminarayana
5. Mr. Tejeswara Kumar

2.Objective of the Course

The objectives of the course are as follows

- Studentswillbeexploredtotheinterconnectionandintegrationofthephysicalworldandthecyberspace.
- Students will be Acquires the design&develop the application of IOT

CourseOutcomes:

- Explain the Market perspective of IoT.
- Discuss the use of Devices, modules used in IoT
- Illustrate the application of IOT

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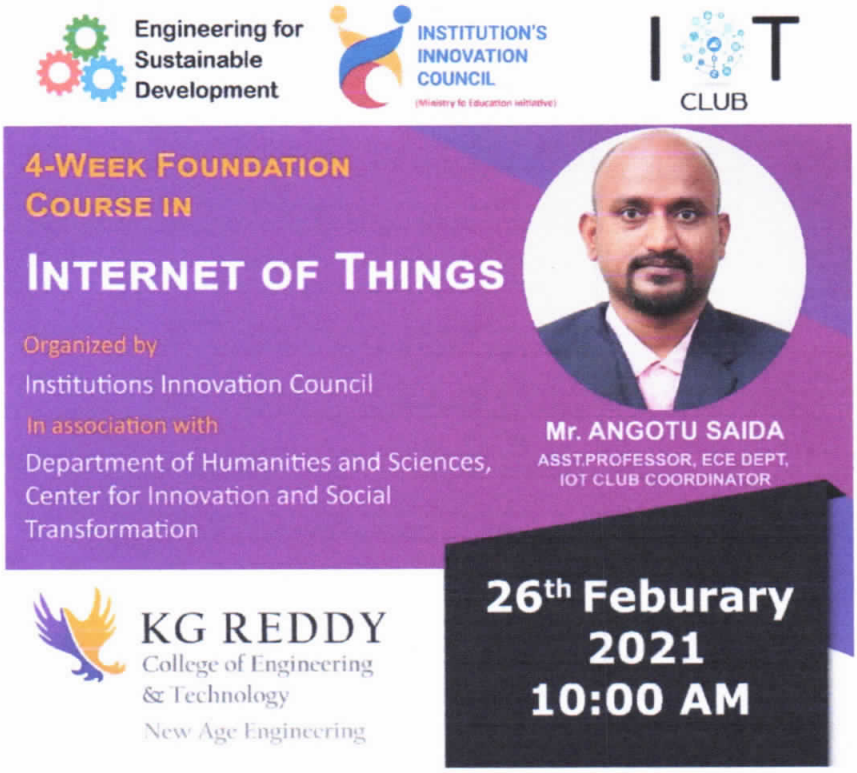
3. Introduction of IoT Club

The IoT Clubhas formed in the year of 2020 in our institution KG Reddy College of Engineering and Technology, Hyderabad, as a great leadership taken by the Department of Electronics and Communication Engineering.

1. Mr.Angotu Saida, Assistant Professor, Dept. of Electronics and Communication Engineering

Logo of the IoT Club

IOT
CLUB



Brochure for the 1st week course

4. fourweeks Content Delivery Description

Week – 1: "Introduction to IOT,basic modules use to design in IoT&IOT – Application, Advantages & Disadvantages

On the Frist week of the Session Mr Angotu Saida have gave an overview on the Definition and Characteristics of IoT, Applications of IoT, basic modules use to design in IoTso that students will get an idea on IoTand the club activities.Later on Mr M N Narsaih has continued the next session on phases of IoT. They are explained about the following topics.

- Introduction to IOT
- Definition and Characteristics of IoT
- Applications of IoT
- Microprocessor/microcontroller
- Sensors and Actuators
- IOT – Advantages & Disadvantages

Fig1: Screen Shots of the Week 1 Session1 by MrAngotu Saida explaining Definition and Characteristics of IoT, Applications of IoT, basic modules use to design in IoT

Fig2: Screen Shots of the Week 1 Session2 by Mr M N Narsaiah explaining Phases of IoT

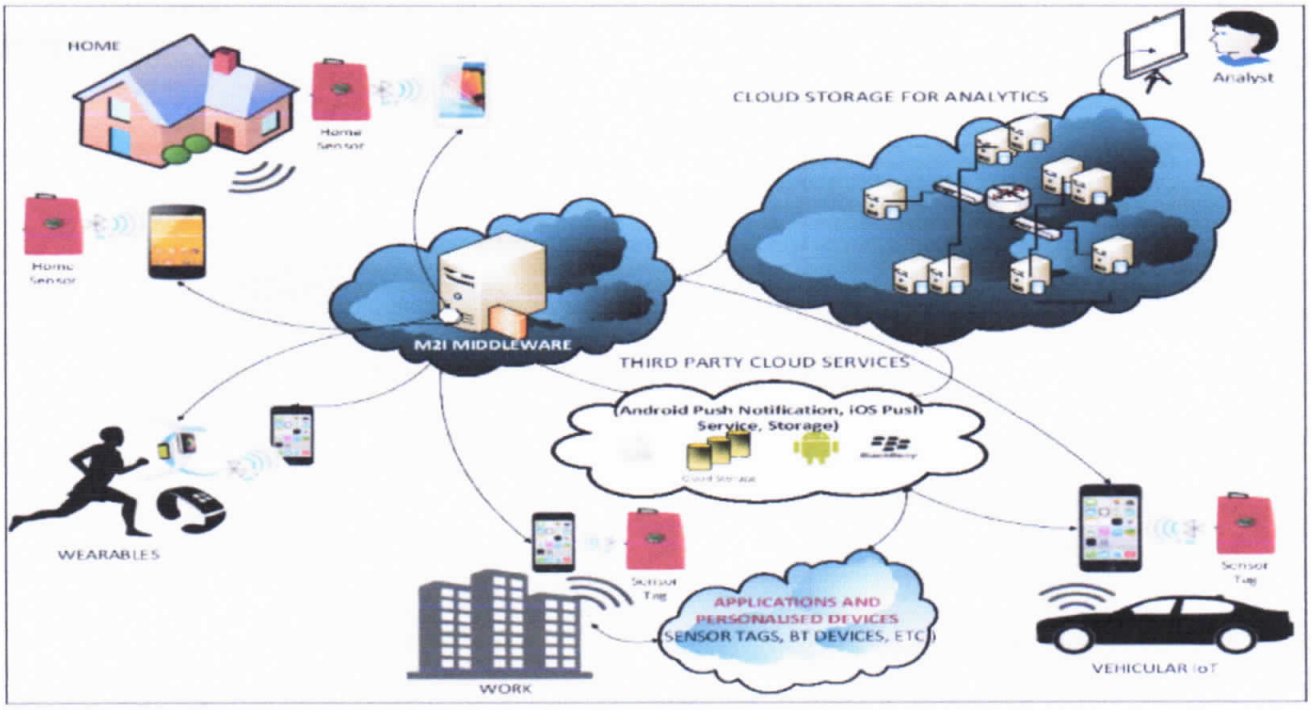


Fig3: how IoT work and connect the people

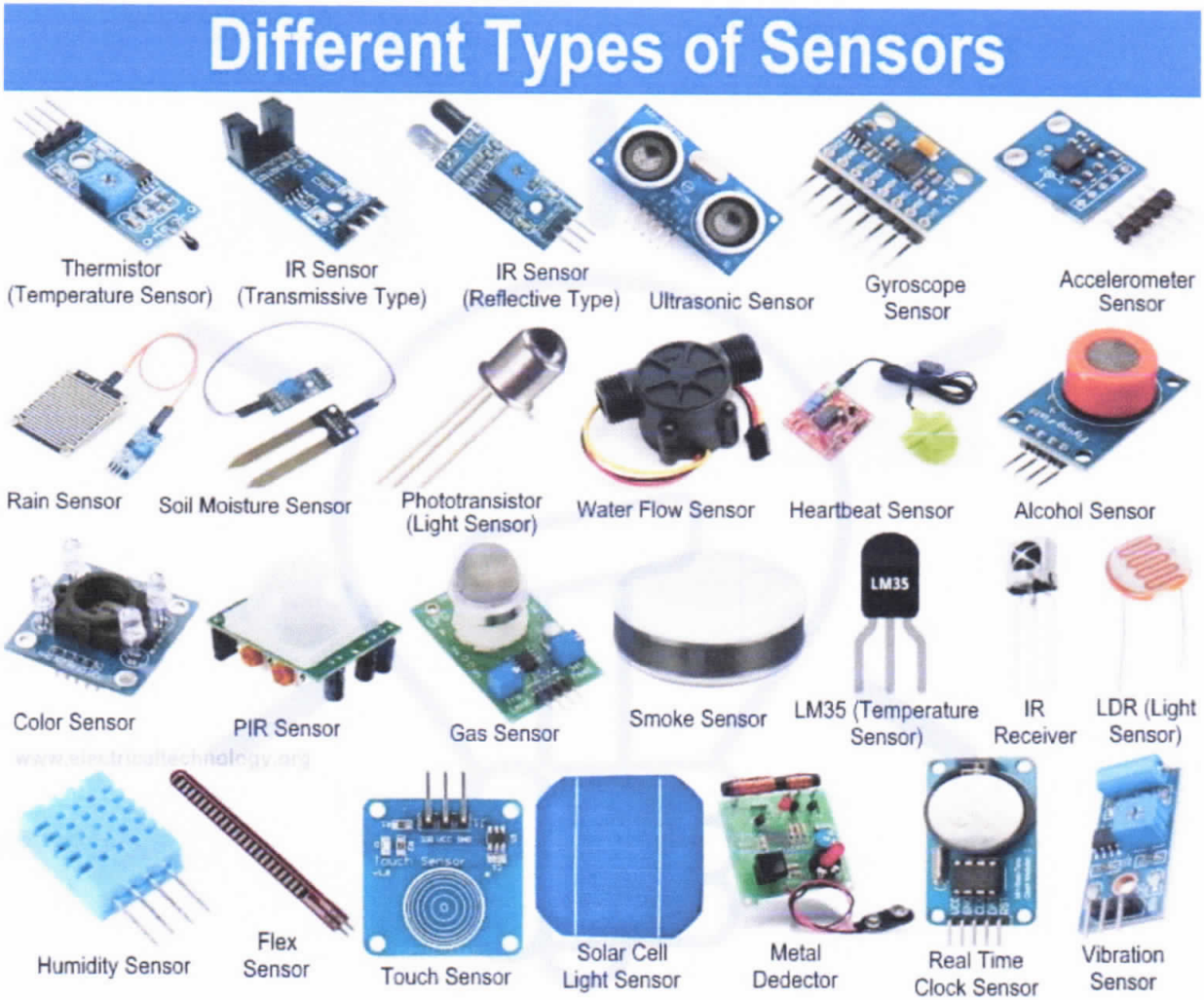


Fig4: how IoT work and connect the people

Week – 2: "Tools used for hardware & software of IoT Introduction to Aurdino: internal structure and pin diagram of Aurdino, hands on -blinking an LED"

On the Second Week we had two Resource persons Mr D Lakshminarayana and Mr Tejeswara Kumar sir have Explain the Tools used for hardware & software of IoT: Introduction to Aurdino: internal structure and pin diagram of Aurdino, hands on -blinking an LED. Sir have explained the about the following topics.

- Tools used for hardware & software of IoT
- Introduction to Aurdino
- Internal structure and pin diagram of Aurdino
- Hands on -blinking an LED

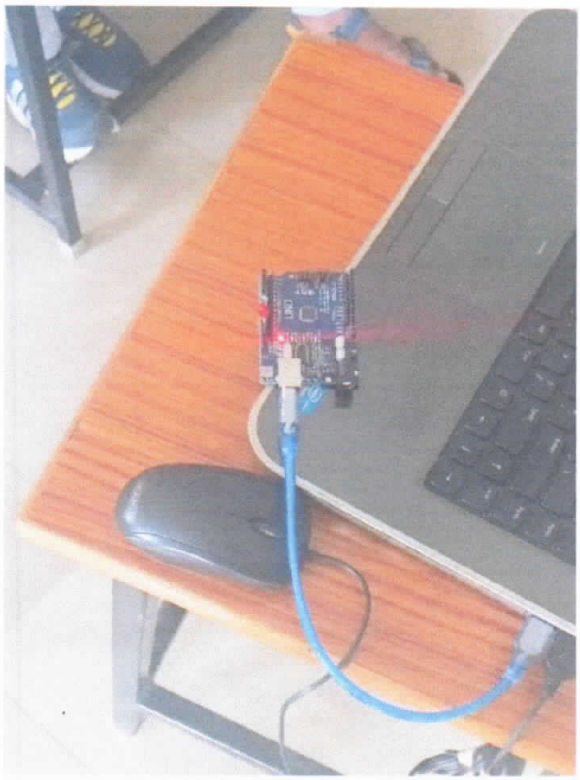


Fig5: Screen Shots of the Week 2 Sessionby Mr Tejeswara Kumar explaining Introduction to Aurdino: internal structure and pin diagram of Aurdino and hands on -blinking an LED

Second Resource Person Mr.D Lakshminarayana has explained about the concepts of Tools used for hardware & software of IoT. So, that student will get an idea on how we will createand write the program.

Week – 3:"Hands on session on switching ON/OFF lights, Running a motor, distance measurement, temperature measurement**"**
On the Third Week we had Resource persons Mr Vijaya Bhasker Reddy. Sir has explained the Hands on session on UNO Aurdino board. So, those Students will get the basic concepts of hands on experience. Sir has explained the about the following topics.

- Hands on session on switching ON/OFF lights
- Running a motor
- Distance measurement
- Temperature measurement

Fig6: Screen Shots of the Week 3 Session by Mr Vijaya Bhasker reddy Hands on session on Aurdino board for various application

Week – 4: **"**Student's presentation: poster presentation, project expo**"**
On the Fourth Week we had Resource persons Mr. Angotu Saida and Mr. Vijaya Bhasker reddy have visited the project expo, students has done the some projects by UNO Aurdino board onswitching ON/OFF lights, Running a motor, distance measurement, temperature measurement.

Fig7: Screen Shots of the Week 4 Session by Mr Angotu Saida and Mr Vijaya Bhasker reddy has visited the students' project expo.

Finally,to understand the student level of the Course,after completion of the four week ESD program we have conducted the online quiz. Based on their performance students are awarded the course completion certificate.

5. Scope of the course

The Internet of things (IoT) is an ecosystem of associated physical gadgets/objects that are available through the web. IoT is an arrangement of interrelated gadgets, advanced items, articles, individuals or creatures that are given novel identifiers (UIDs) and the capacity to move information over an organization without requiring any human collaboration. The possibility of this article is to give a review about IoT building squares and get down on how Electronics HW and Embedded Software assume an essential part in IoT. **IoT** has proved to be one of the best tools for the healthcare industry. It helps provide advanced healthcare facilities to patients, doctors, and researchers. These facilities include smart diagnosis, wearable devices for tracking health, patient management, and many more.

Department of Electronics and Communication Engineering

4 Week Course on Internet of things

Outcomes:

- Explain the Market perspective of IoT.
- Discuss the use of Devices, modules used in IoT
- Illustrate the application of IOT

Prerequisites:

Networking, Sensing, Databases, Programming and Related Technology

Topics to be covered

WEEK-1
Introduction to IOT: IOT – Definition and Characteristics of IoT, Applications of IoT, basic modules use to design in IoT: Microprocessor/microcontroller, sensors and actuators, IOT – Advantages & Disadvantages

WEEK-2
Tools used for hardware & software of IoT: Introduction to Aurdino: internal structure and pin diagram of Aurdino, hands on -blinking an LED

WEEK-3
Hands on session on switching ON/OFF lights, Running a motor, distance measurement, temperature measurement

WEEK-4
Student's presentation: poster presentation, project expo

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Department of Electronics and Communication Engineering

KGRCET/ECE/IOT CLUB/2020-21/SEM-I/Ref No: 97/A. Date: 19/02/2021

Circular

It is here by informed to all the students of I B.Tech I SEM. The department of Electronics and Communication Engineering is organising the A Four Week Foundation Course on Internet of Things, as a part of Emerging Technology course, Under Engineering for Sustainable Development Program, organised by IoT club from February 26th to March 19th, 2021.

Coordinator 19/2/2021.

Chairman 19/2/21

Copy to

- Principal
- All the Staff of ECE
- Dean Academic
- Notice Board
- IQAC
- CEED

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Engineering for Sustainable Development

I T CLUB

Department of Humanities and Sciecnes

Workshop on Emerging Technologies (Internet of Things)

Attendance Sheet **Date:26-02-2021**

S.No	Roll Number	Name of the Student	Signature
1	20QM1A0401	Addetla Preethi	A.Preethi
2	20QM1A0407	Eppaturi Naresh	E. Naresh
3	20QM1A0415	Kammari Pavan Kumar	K.Pavan
4	20QM1A0420	Kuchuru Siddhartha Reddy	K. Siddhartha Reddy.
5	20QM1A0503	Ajay Angad Muley	Ajay.
6	20QM1A0515	B.Kavitha	B. Kavitha.
7	20QM1A0529	Doli Harshith Tej	D. Harshith Tej
8	20QM1A0552	Kotyada Sai Praneeth	K. Sai Praneeth.
9	20QM1A0567	P Govardhan Reddy	
10	20QM1A0575	Rajitha	Rajitha
11	20QM1A0591	Sureddy Sathvika Reddy	Sreekaj.
12	20QM1A0580	S Keerthana	
13	20QM1A0598	Thalla Anusha	T. Anusha
14	20QM1A05A9	Shivaghoni Kirangoud	
15	20QM1A6614	D.Saikeerthi	
16	20QM1A6618	Gade Harshitha	G.Harshitha
17	20QM1A6622	Madhuri Katari	K. Madhuri
18	20QM1A6631	Mohammed Farhaan Bhikba	M. Farhaan
19	20QM1A6642	Sathwika Dimmiti	

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Engineering for Sustainable Development

I CLUB T

Department of Humanities and Sciecnes

Workshop on Emerging Technologies (Internet of Things)

Attendance Sheet **Date:05-03-2021**

S.No	Roll Number	Name of the Student	Signature
1	20QM1A0401	Addetla Preethi	A. Preethi
2	20QM1A0407	Eppaturi Naresh	E. Naresh
3	20QM1A0415	Kammari Pavan Kumar	
4	20QM1A0420	Kuchuru Siddhartha Reddy	K. Siddhartha
5	20QM1A0503	Ajay Angad Muley	
6	20QM1A0515	B.Kavitha	B. kavitha.
7	20QM1A0529	Doli Harshith Tej	D. Harshith Tej
8	20QM1A0552	Kotyada Sai Praneeth	K. Sai Praneeth
9	20QM1A0567	P Govardhan Reddy	
10	20QM1A0575	Rajitha	
11	20QM1A0591	Sureddy Sathvika Reddy	
12	20QM1A0590	S Keerthana	Keerthana.
13	20QM1A0598	Thalla Anusha	T. Anusha
14	20QM1A05A9	Shivaghoni Kirangoud	
15	20QM1A6614	D.Saikeerthi	D. Saikeerthi
16	20QM1A6618	Gade Harshitha	
17	20QM1A6622	Madhuri Katari	K. Madhuri
18	20QM1A6631	Mohammed Farhaan Bhikba	M. Farhaan
19	20QM1A6642	Sathwika Dimmiti	

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Sustainable Development

IoT CLUB

Department of Humanities and Sciences

Workshop on Emerging Technologies (Internet of Things)

Attendance Sheet **Date:12-03-2021**

S.No	Roll Number	Name of the Student	Signature
1	20QM1A0401	Addetla Preethi	A Preethi
2	20QM1A0407	Eppaturi Naresh	Naresh
3	20QM1A0415	Kammari Pavan Kumar	
4	20QM1A0420	Kuchuru Siddhartha Reddy	
5	20QM1A0503	Ajay Angad Muley	
6	20QM1A0515	B.Kavitha	
7	20QM1A0529	Doli Harshith Tej	D. Harshith Tej
8	20QM1A0552	Kotyada Sai Praneeth	K. Sai Praneeth
9	20QM1A0567	P Govardhan Reddy	
10	20QM1A0575	Rajitha	Rajitha
11	20QM1A0591	Sureddy Sathvika Reddy	Sureddy.
12	20QM1A0591	S Keerthana	
13	20QM1A0598	Thalla Anusha	
14	20QM1A05A9	Shivaghoni Kirangoud	
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IoT CLUB

Department of Humanities and Sciences

Workshop on Emerging Technologies (Internet of Things)

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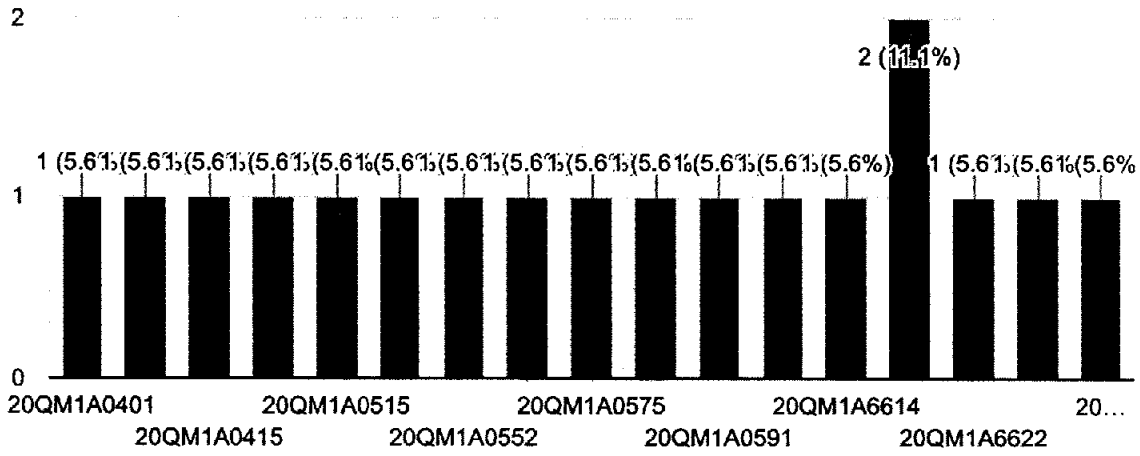
16	20QM1A6618	Gade Harshitha	G. Harshitha.
17	20QM1A6622	Madhuri Katari	
18	20QM1A6631	Mohammed Farhaan Bhikba	M Farhaan.
19	20QM1A6642	Sathwika Dimmiti	

IOT CLUB: Foundation Course on IOT Online Quiz A. Y: 2020-21

18 responses

Roll No(TEN DIGITS)

18 responses



Name of the student:

18 responses

Naresh Eppaturi

Barkam kavitha

Rajitha

Madhuri Katari

SUREDDY SATHVIKA REDDY

Thalla Anusha

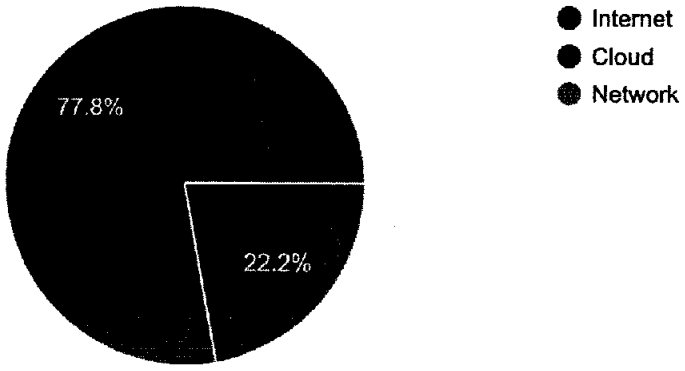
P GOVARDHAN REDDY

Sathwika Dimmiti

Addetla preethi

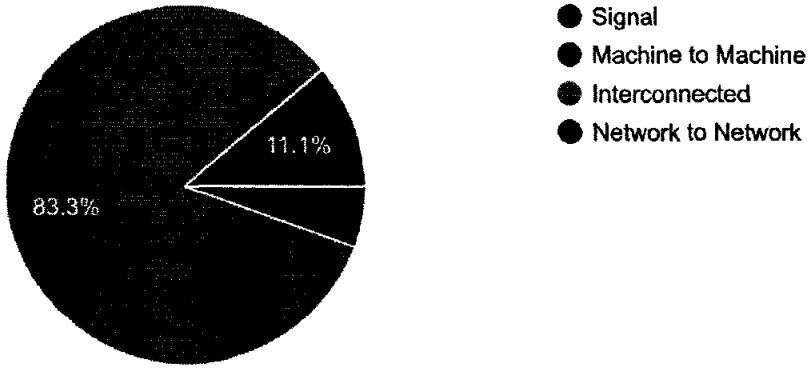
1. Which of the following is the way in which an IoT device is associated with data?

18 responses



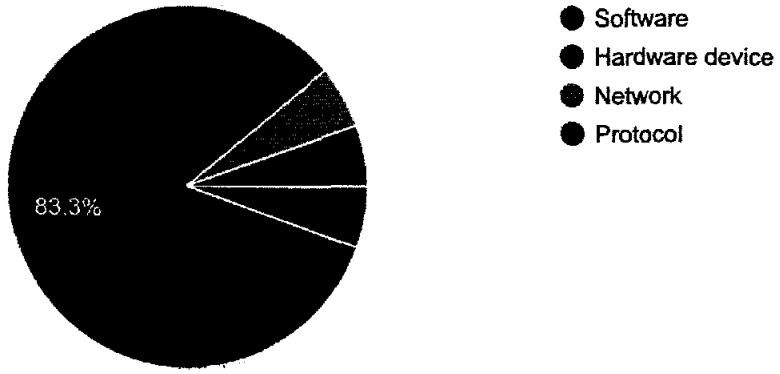
2. An IoT network is a collection of _____ devices.

18 responses



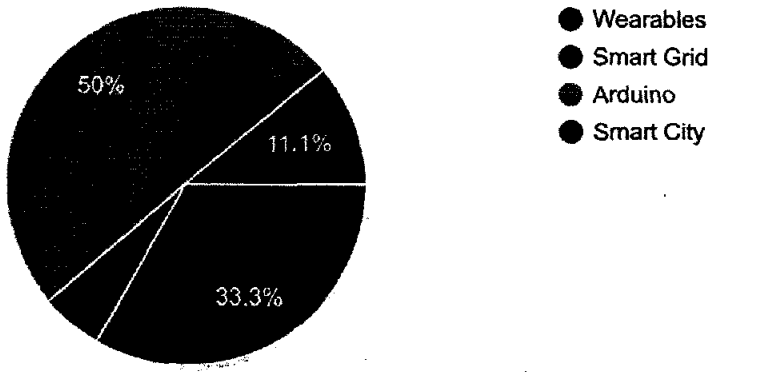
3. What is the Arduino UNO?

18 responses



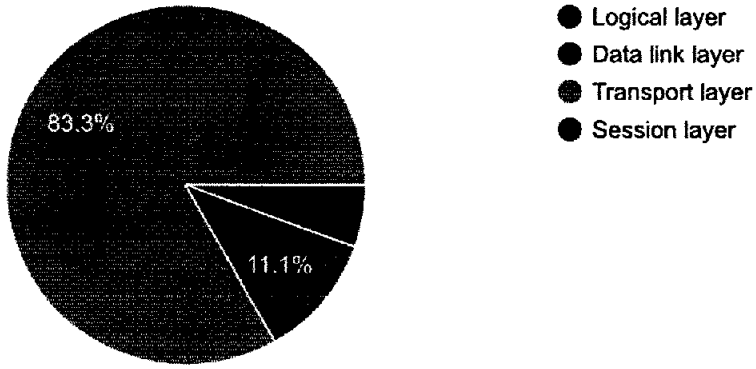
4. Which of the following is not an application of IoT?

18 responses



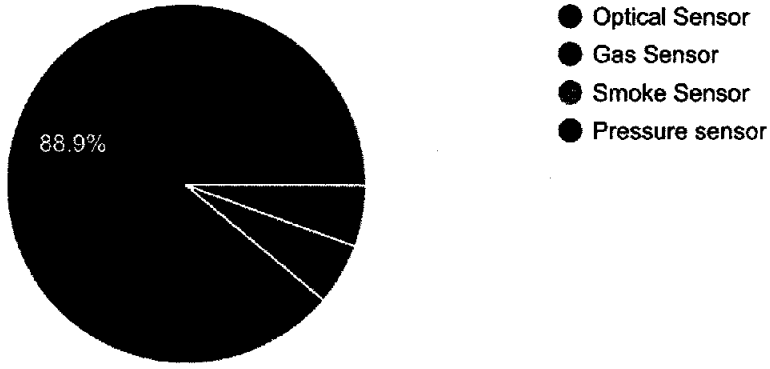
5. Which of the following layers provides end-to-end communication in IoT?

18 responses



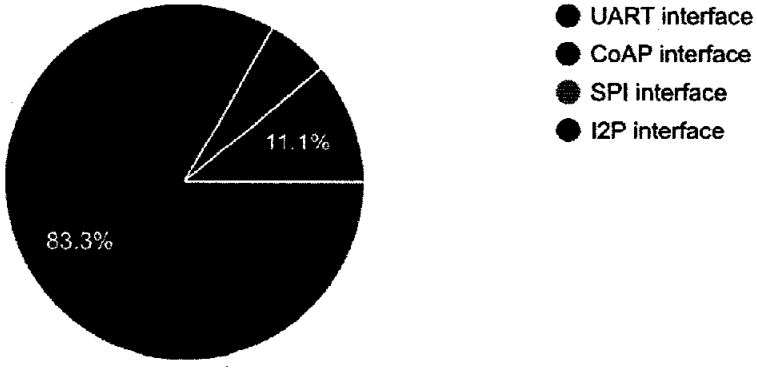
6. Which of the following devices is used to measure the gases or liquid?

18 responses



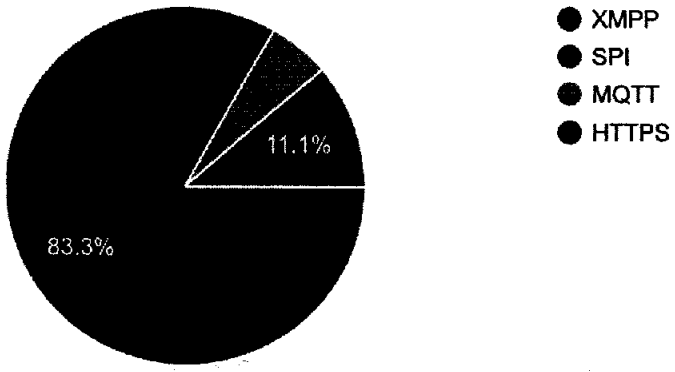
7. Which interface does the fingerprint sensor use?

18 responses



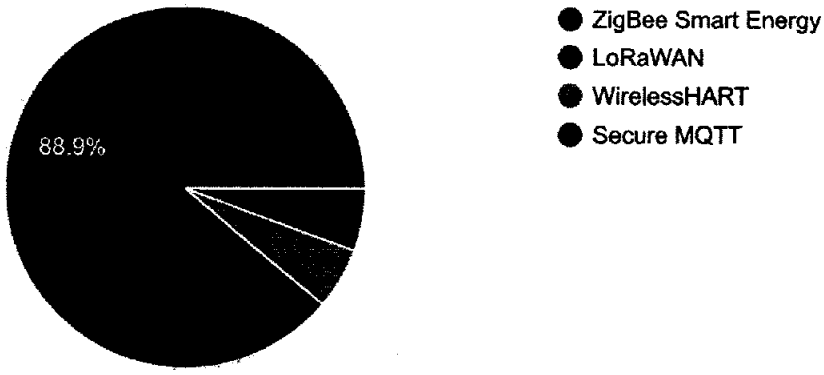
8. Which of the following protocols does the secure digital card application use?

18 responses



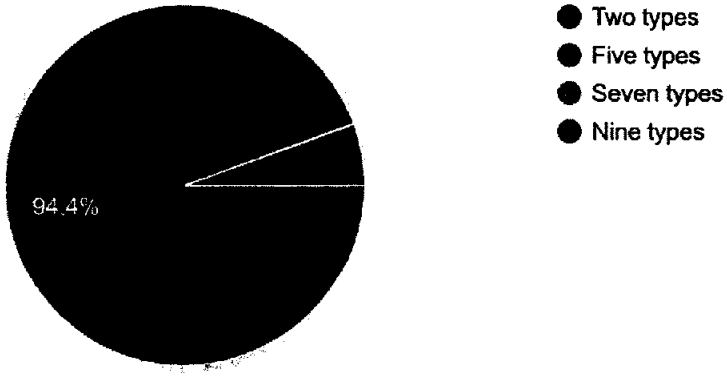
9. Which of the following protocols does not exist at the data link layer?

18 responses



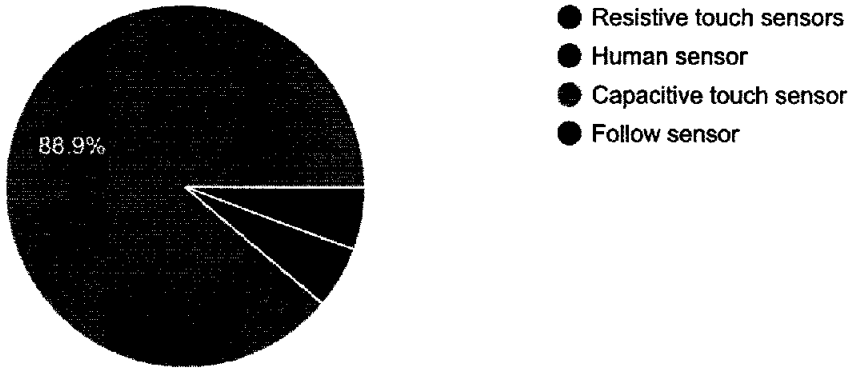
10. How many types of capacitive touch sensors in IoT?

18 responses



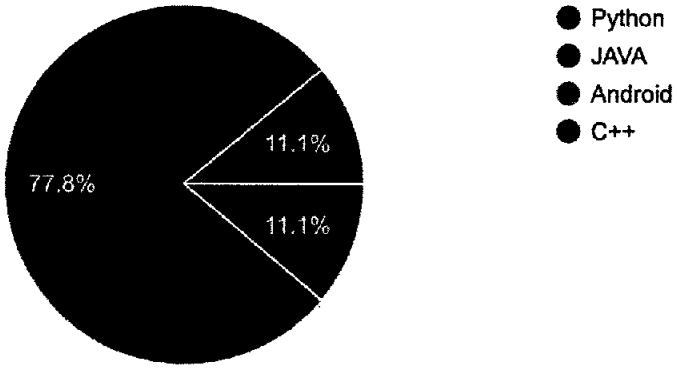
11. Which of the following touch sensors is used in a cell phone?

18 responses



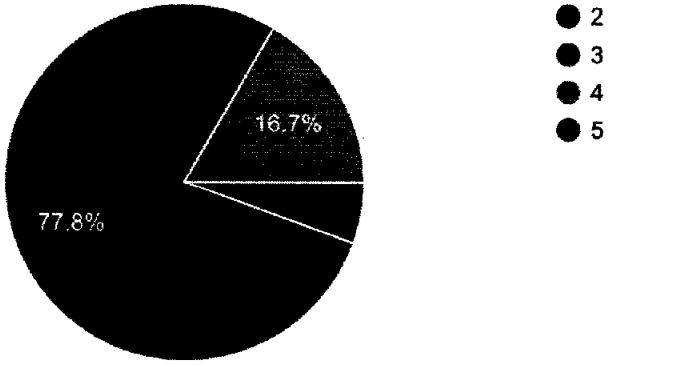
12. Which of the following languages does GSN work on?

18 responses



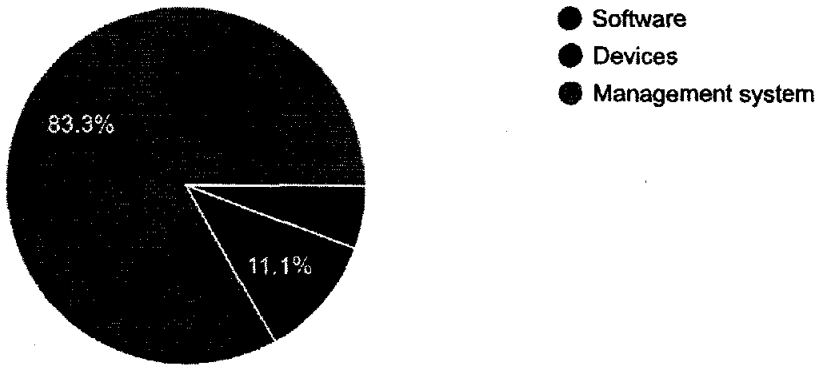
13 ..... types of voice communications are in IoT environment.

18 responses



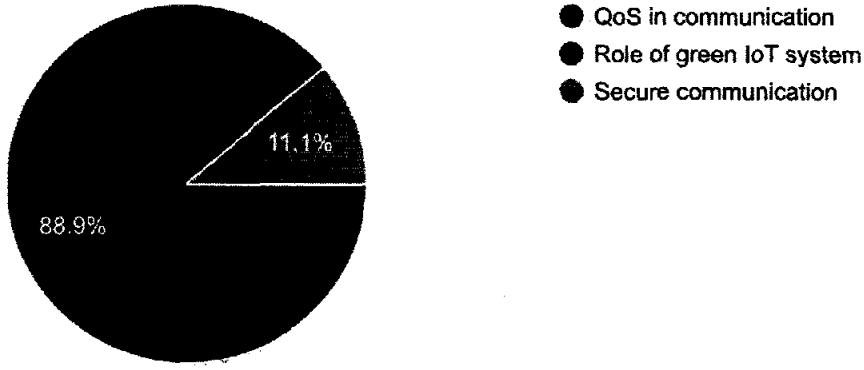
14. IoT devices can easily lead to catastrophe without .....

18 responses



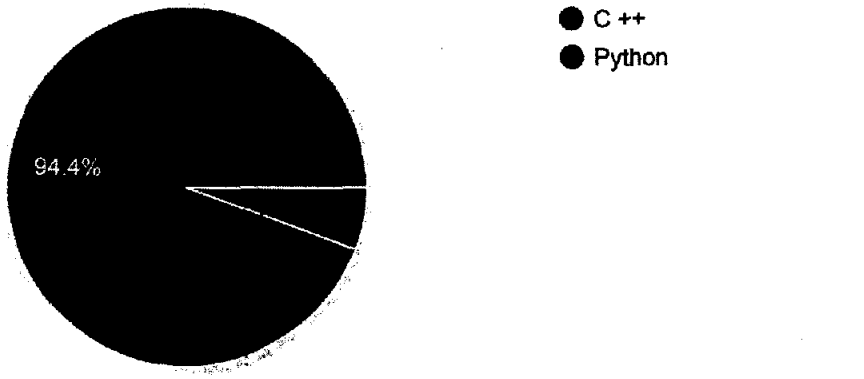
15. Which is the future application of IoT

18 responses



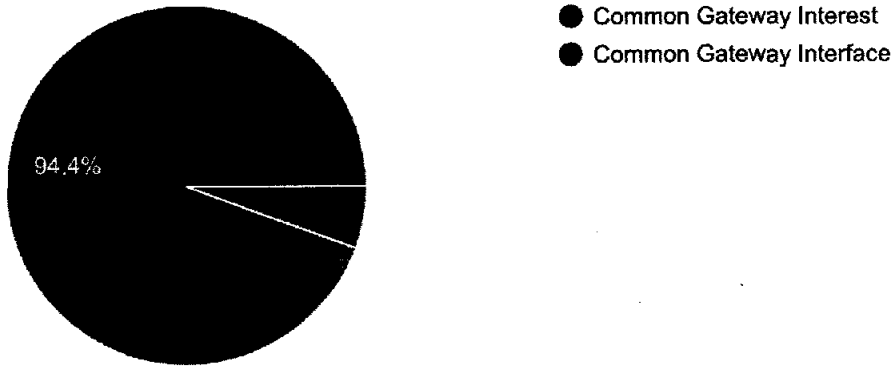
16. Which language is preferred for IoT analytics ?

18 responses



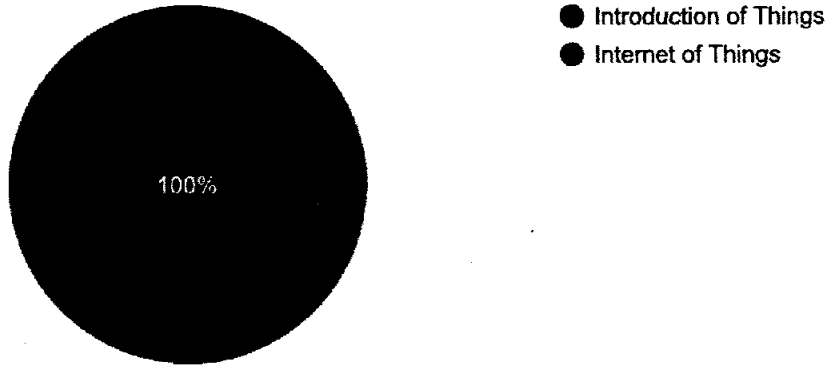
17. What does CGI stands for?

18 responses



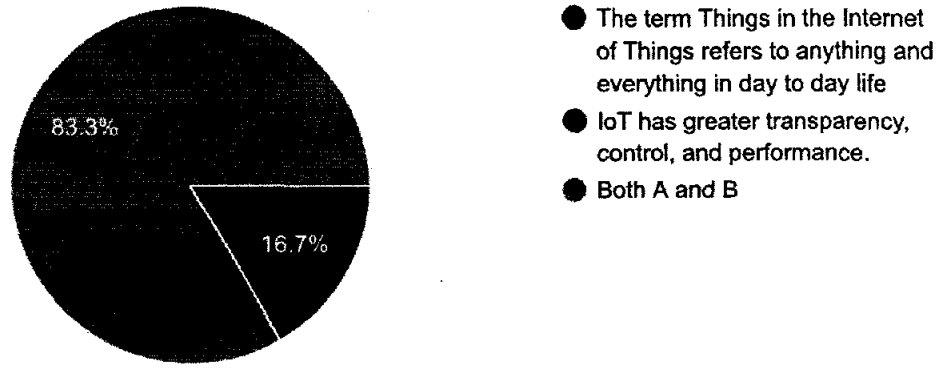
18. IoT stands for?

18 responses



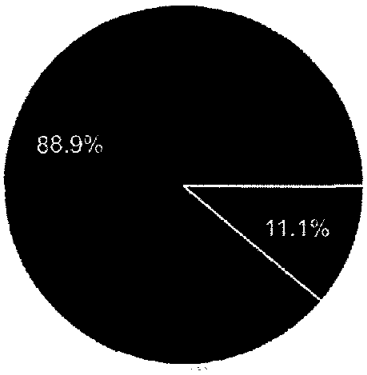
19. Which of the following is true about IoT?

18 responses



20. IoT is an advanced automation and analytics system which deals with?

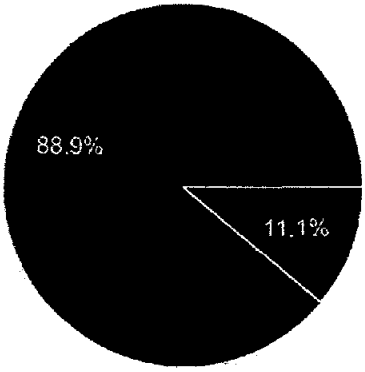
18 responses



- sensor, networking
- electronic
- cloud messaging
- All of the above

21. Which of the following is not an advantage of IoT?

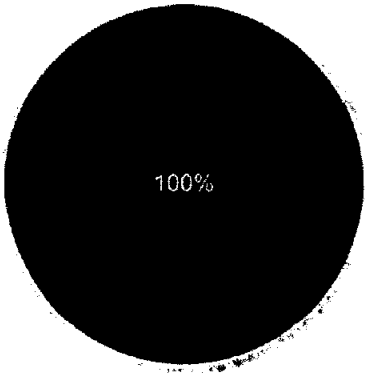
18 responses



- Improved Customer Engagement
- Security

22. Active Engagement Features of IOT means?

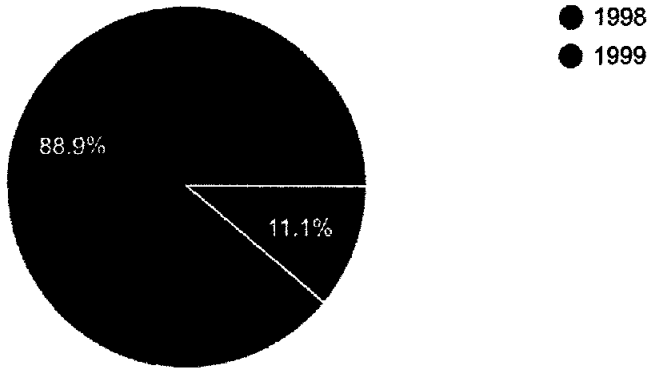
18 responses



- IoT makes the connected technology, product, or services to active engagement between each other.
- It makes the complete failure of the system.

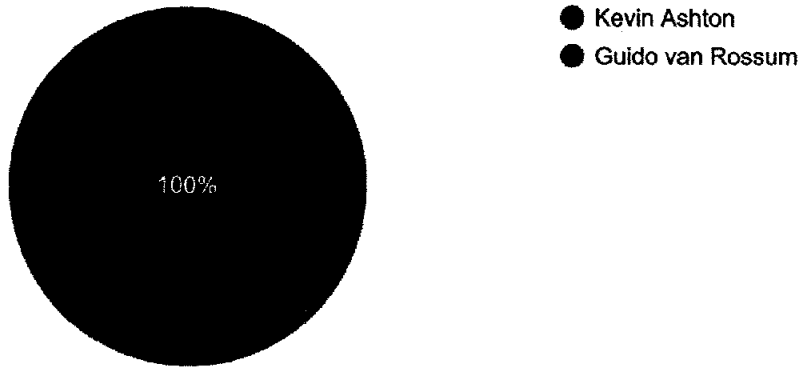
23. In Which year, the term "Internet of things" was coined?

18 responses



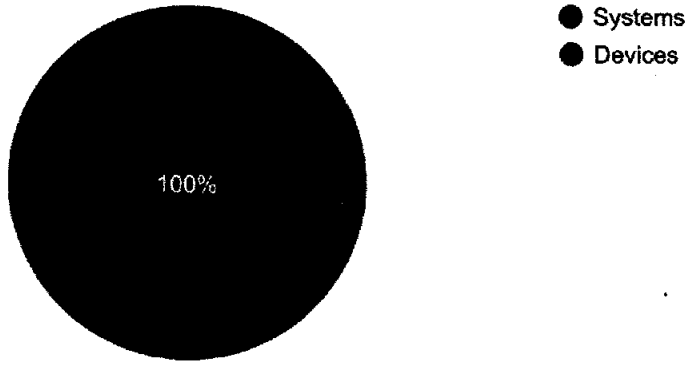
24. The term "Internet of things" was coined by?

18 responses



25. API enables services portability between _____

18 responses



IoT CLUB

A+ NAAC

KG REDDY College of Engineering & Technology

Engineering India's Changemakers

IoT Club, Dept. of ECE

In association with H & S Department

CERTIFICATE OF PARTICIPATION

This is to certify that Mr./Ms. Addetla Sreethi - 20QM1A0401 *has attended the*

"A FOUR WEEK FOUNDATION COURSE ON INTERNET OF THINGS"

at K G Reddy College of Engineering and Technology from 26th February 2021 to 19th March 2021.

As a part of Emerging Technology Course under Engineering For Sustainable Development Program.

Angotu Saida
Coordinator

M N Narsaiah
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Principal

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In association with H & S Department

CERTIFICATE OF PARTICIPATION

This is to certify that Mr./Ms. K. Pavan Kumar - 20QM1A0415 has attended the

"A FOUR WEEK FOUNDATION COURSE ON INTERNET OF THINGS"

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Angotu Saida
Coordinator

M N Narsaiah
Chairman

Dr. R. S. Jahagirdar
Principal

A Four Week Foundation Course on Internet of Things Google Feedback- A. Y: 2020-21

15 responses

Publish analytics

Roll No(TEN DIGITS)

15 responses

20QM1A6642

20QM1A0420

20QM1A0598

20QM1A0407

20QM1A0515

20QM1A0575

20QM1A0415

20QM1A0529

20QM1A0552

Name of the student:

15 responses

Sathwika Dimmiti

K.Siddhartha Reddy

Thalla Anusha

Naresh

Barkam kavitha

Rajitha

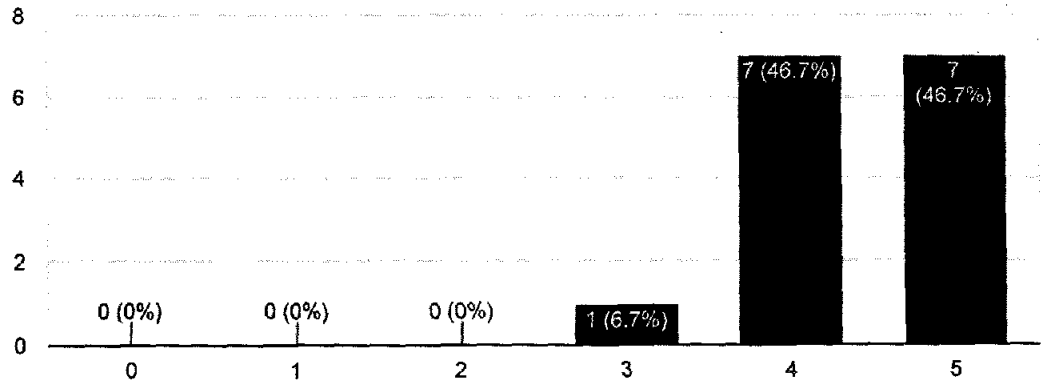
K pavan kumar

Doli Harshith tej

KOTYADA SAI PRANEETH

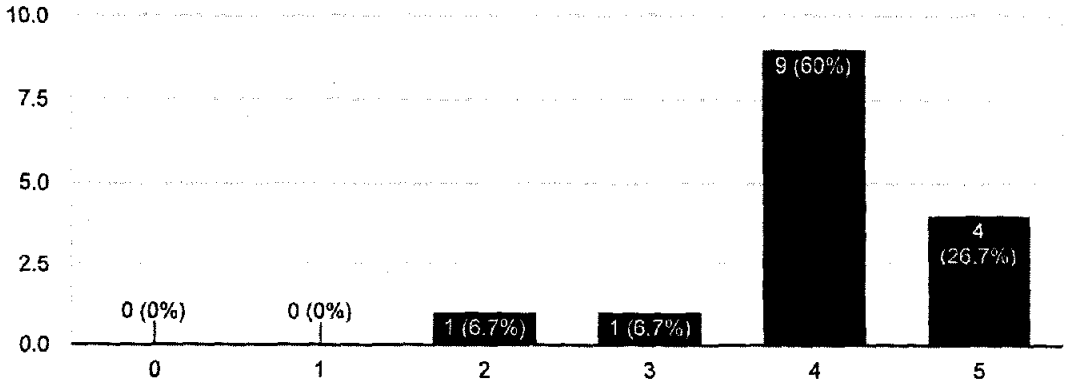
1. How was the overall organization of the foundation course on IoT?

15 responses



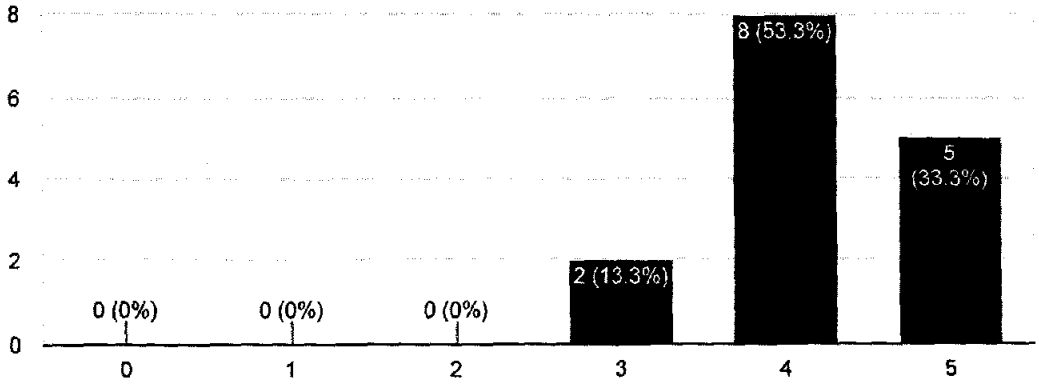
2. How relevant was the content discussed by the speaker?

15 responses



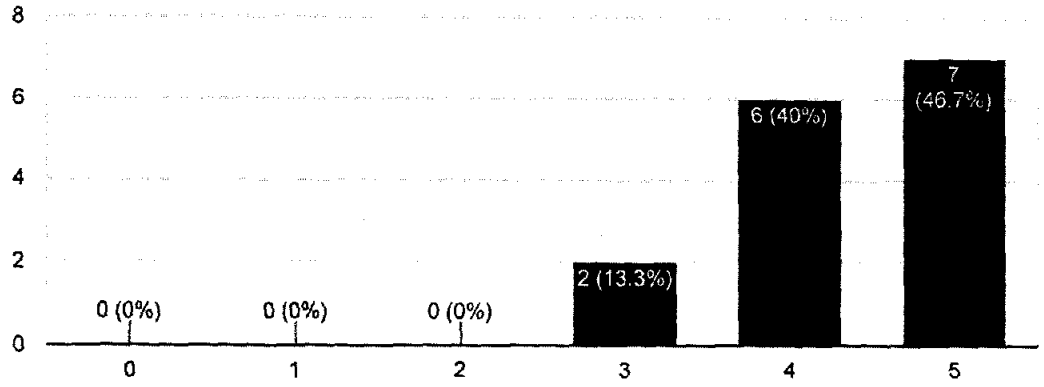
3. Are you satisfied with the time and venue?

15 responses



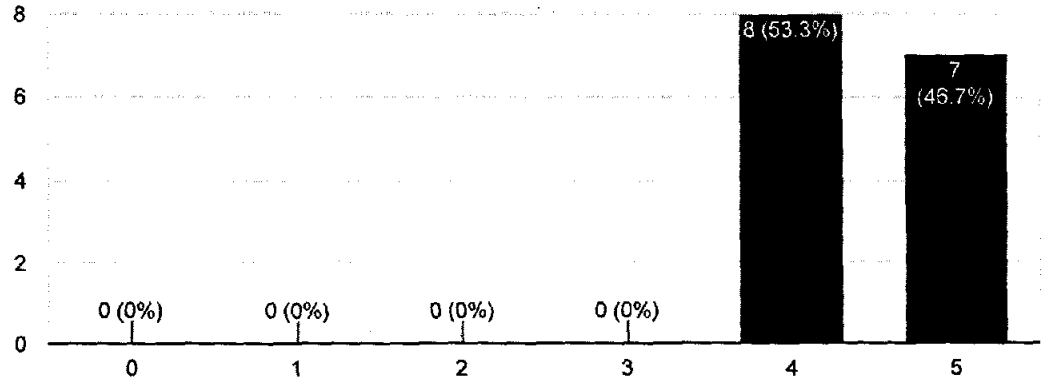
4. How much interesting this session was for you?

15 responses



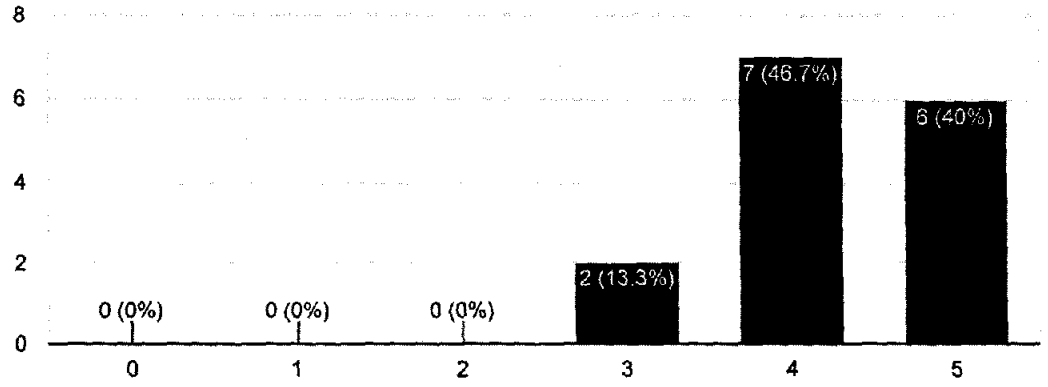
5. How was your preparation about the topic before the foundation course on IoT?

15 responses



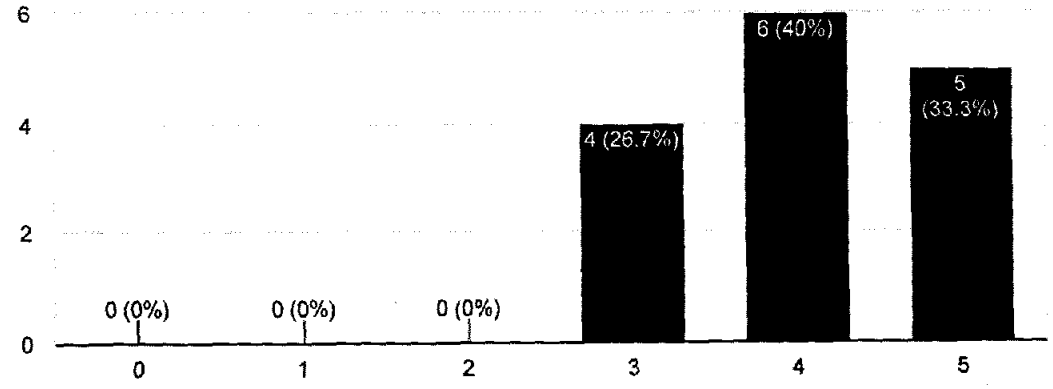
6. Did the lecture cover what you were expecting?

15 responses



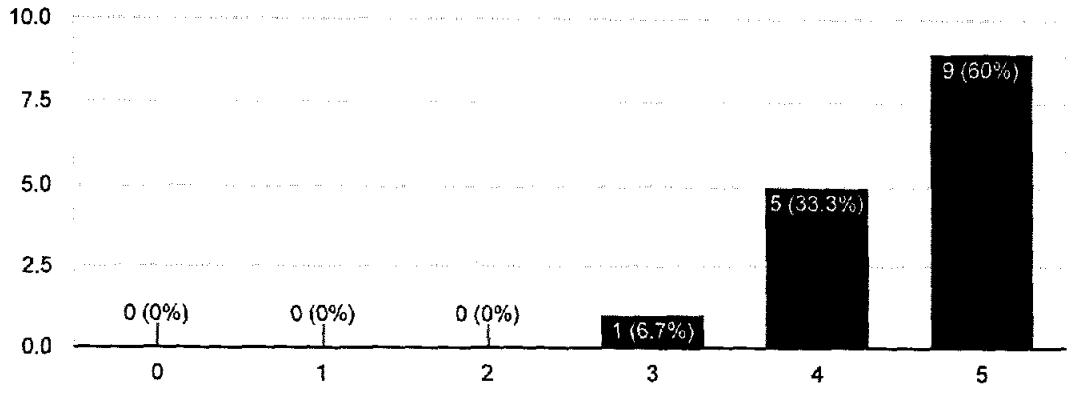
7. What is your opinion about the speaker?

15 responses



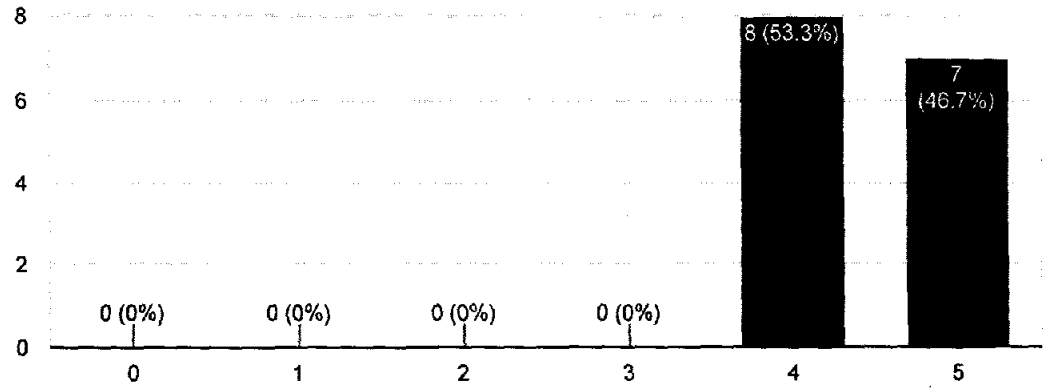
8. How much this session was useful from the knowledge and information point of view?

15 responses



9. Overall effectiveness of the foundation course on IoT?

15 responses



10. What did you like best about the foundation course on IoT?

15 responses

Explanation

Phyton

Arduino course

Explains about iot

Learning new things which we don't know

IOT Applications in live

Doing the projects based on IOT

How iot is help full in current technology. It's makes things easy.....

Got to know about new information and the teaching is very good. And the faculty very much encouraged us to do the projects.

11. What did you like least about the foundation course on IoT?

15 responses

Nothing

None

Asking questions

Sensors

Asking Questions

Nothing least

It should be recommended to everyone so that anyone can learn anything better than nothing. It will help our students in future

.....

12. Please state things you would want to see improved in future advanced course on IoT?

15 responses

None

More practical

Showing practically

Arduino and sensors

Explaining practically

Smart appliances,smart security systems and smart home hubs

Slides explanation

Nothing but it could be great if conducted in offline

Doing many real time projects

13. Please mention other areas of foundation course on IoT that you would like to have?

15 responses

Nothing

Advance courses

1

I would like to learn technical languages

Farming

Doing more projects based on IOT

.....

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Practical learning