

B.M.S COLLEGE OF ENGINEERING

Autonomous Institute, Affiliated to VTU DEPARTMENT OF COMPUTER SCIENCE ANDENGINEERING Organized by Protocol Club



CodeAthon - Code With Protocol

OBJECTIVES:

1. To help participants analyse complex data and detect trends and help solve problems.

Date: 4th July,2020 Platform: HackerRank

Faculty Coordinator: Student Coordinators:

Asha GR Prathibha R

Karthik V Kaushal Jalan

Name of the collaborating agency - NIL

DESCRIPTION: Codeathon was a competitive coding competition with the purpose of familiarizing the students with the coding challenges that they would face in a job interview. The event was held on HackerRank. The participants were expected to solve a few real-life problems in a language of their choice and had to pass a few test cases to get a score. In all of the questions only one was rated easy and the rest were either hard or of medium difficulty. The score for each problem was based on the number of test cases passed correctly hence even though one could not pass all cases, he/she could at least get the scores for the cases passed. The event was open to students from all colleges and around 20 participated in the event. E-certificates were provided to all the participants.

OUTCOMES:

- 1. Apply knowledge to analyse and solve company problems
- 2. Key to unlocking the value of corporate and customer data.
- 3. Participate in coding events and innovative solutions to problem statements.

No. of participants - 20

ATTENDANCE SHEET:

V			CODEATHON			
2	DATE:					
2	SN STUDENT NAME	USN	MAIL ID(OPTIONAL)	PHONE NUMBER(MANDATORY)	REGISTRATION FEE	PRIZE AMOUN
4	1 Md Ibaduddin Saffan	1BM19CS085	saffanmd.cs19@bmsce.ac.in	9945649204	100	
5	2 Nimit Sajal	1BM18CS063	nimit.cs18@bmsce.ac.in	7091357239	100	
6	3 MOHNISH JAIN	1BM19EC081	mohnishjain.ec19@bmsce.ac.in	7985225511	100	
Y	4 Arun Teja Kamisetti	18M18CS041	kamisetti.cs18@bmsce.ac.in	9381091844	100	
	5 Aprameya V Bhat	18M19ME018	aprameyav.me19@bmsce.ac.in	8105777079	100	
+	6 Aravind kanamarlapudi	199302114(MIT)	karavind246815@gmail.com	7013577861	100	
10	7 Matam Vijayeshjeevan	1BM19CS084	vijayeshjeevan.cs19@bmsce.ac.in	8050978125	100	
(1)	8 Aishwarya Varadannanavar	1BM19CS008	alshwarya.cs19@bmsce.ac.in	9632549933	100	
12	9 Pratyush Jain	1BM19ET040	pratyushjain.te19@bmsce.ac.in	8962562552	100	
13	10 Divyanshu jhanwar	1BM19CS053	divyanshuj.cs19@bmsce.ac.in	9589088133	100	
19	11 SHREEHARI KULKARNI	1BM19CS153	shreehari.cs19@bmsce.ac.in	9916524828	100	
15	12 Abhijnya K G	1BM18CS002	abhijnya.cs18@bmsce.ac.in	7259296279	100	
10	13 Ankitha	1BM18CS016	ankitha.cs18@bmsce.ac.in	9901253863	100	
17	14 Adithi Girimaji	1BM19CS005	adithi.cs19@bmsce.ac.in	9686014609	100	
18	15 Anisha Nair	1BM19CS018	anishanair.cs19@bmsce.ac.in	9740202396	100	
r la	16 Parag Gattani	1BM18CS067	parag.cs18@bmsce.ac.in	9468608117	100	
20	17 Shreya laddha	1BM18CS103	shreya.cs18@bmsce.ac.in	9980419038	100	
21	18 Vallisha M	1BM19CS177	vallisha.cs19@bmsce.ac.in	9008047742	100	
22	19 Jahnavi Satish Shanbhag	1BM19CS065	jahnavisatish.cs19@bmsce.ac.in	8431738202	100	
23	20 Abhinandan Udupa	1BM19CS003	abhinandan.cs19@bmsce.ac.in	7348980332	100	
14	21 Swetha Swaminathan	18M19/5164	swetha1654@gmail.com	9731583928	100	
15			A 20 20 10 10 10 10 10 10 10 10 10 10 10 10 10			

Screen Shots of the event:





Name of the Department: Computer Science & Engineering

Name of the Activity: Online Hackathon – "Ode-To-Code"

Objectives:

• Develop efficient solutions for the problem statements given by Riskcovry on Sentiment analysis and emotion detection

Date, Time and Venue of the Activity: 5th to 6th June 2021, Online Mode

Name and details of collaborating agency: Riskcovry and CodeIO

Brief Summary of the Programme:

The Department of Computer Science and Engineering in association with Riskcovry organized Hackthontitled "Ode-To-Code" on 5th-6th June 2021 (24-hours). The evaluators for the Hackathon were from the Technical Team of Riskcovry. Totally around 130 teams from various colleges such as B.M.S. College of Engineering, PES University, Dr.Ambedkar Institute of Technology, MSRIT, BIT, BNMIT, Nitte Meenakshi Institutue of technology, Vellore Institute of Technology, BITS Goa, VelTech Institute of Technology (Chennai), Sri SaiRam College of Engineering (Chennai) participated in the Hackathon .

The Hackthon was conducted online and the evaluations were done online using Cisco Webexplatform. The event started at 10:00 AM on 5th June 2021 by welcome from Dr.Umadevi, HOD, Department of CSE, B.M.S. College of Engineering. Then Saurav, Senior Engineering Manager explained the problem statement to all the participants. Two problem statements one on emotion detection and one on sentiment analysis were given and the participants were given the choice to select one among them.

The Hackathon ended by thanking every single person on the group for participating in the Hackathon. It's events like these that allow us to learn and explore from some of the great ideas participants come up with. Also, there were spot wards (totally 3 awards) during the course of Hackathon which allowed interaction between the participants and Riskcovry team. The Winner of the Hackathon was awarded Rs.10,000 Cash Prize along with COVID Insurance of Rs. 6 Lakh and the Runner of the Hackathon was awarded Rs.5,000 Cash Prize along with COVID Insurance of Rs. 6 Lakh. Also, Spot Award winners were given various Medical Insurance offers from Riskcovry.

The final round of evaluations and presentations had totally around 10 teams and the winners were selected.

The Winners of the Hackathon are as follows:

Winner:

Team Name: Code Jigglers

Name of the Team Member 1: Dhruv Krishna Shetty

College: PES University RR

Name of the Team Member 2: NerellaPushpak Badri Jagannadham Gupta

College: PES University EC Campus

Name of the Team Member 3: Adarsh E Nair

College: PES University RR

Runner:

Team Name: BIT Spam Bytes

Name of Team Member 1: Niharika C College: Bangalore Institute of Technology Name of Team Member 2: Ramya BS College: Bangalore Institute of Technology

Name of Team Member 3: Phoebe P

College: Bangalore Institute of Technology Name of Team Member 4: Vivek MR

College: Bangalore Institute of Technology

Spot Award Winners:

Spot Award Winner 1:

Prize: Health Insurance Name: Prathik B Jain College: PES, Bangalore Team Name: Puthon

Spot Award Winner 2:

Prize: Term Life Insurance Name: Bhuwan Kumar Singh

College: Maulana Azad National Institute Of Technology, Bhopal

Team Name: Simple Coders

Spot Award Winner 3:

Prize: Health Insurance

Name: Isha Jain

College: Maulana Azad National Institute Of Technology, Bhopal

Team Name: Simple Coders

Outcomes:

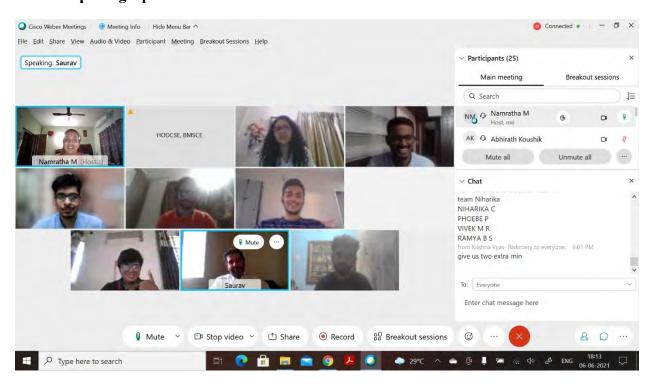
- The student teams developed efficient solutions for the problem statements given by Riskcovry on Sentiment analysis and emotion detection
- Initial round of review and shortlisting based on the ideas and presentation for the final review with code deomonstration

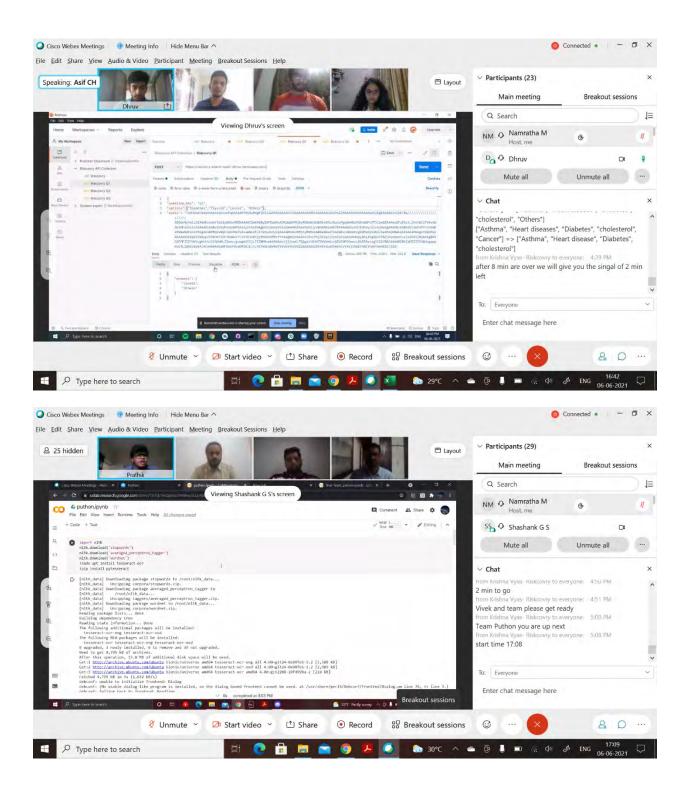
Number of participants: 200 UG Students

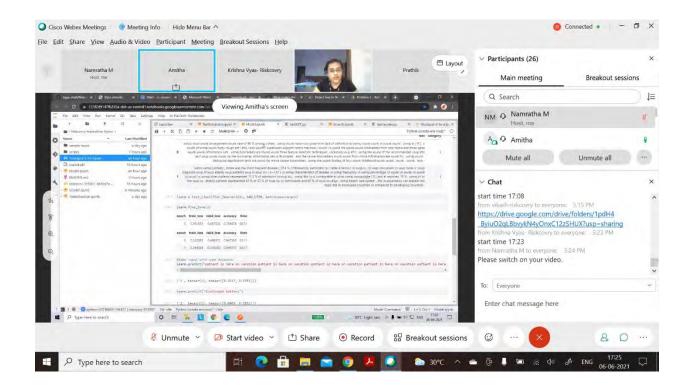
Internal Participants: 20

External Participants: 180

Relevant photographs of the event:







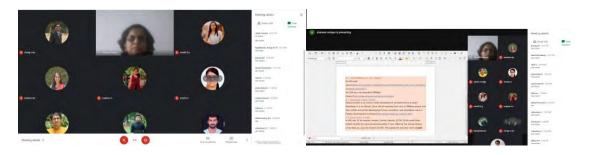
Workshop on IoT Programming using Contiki OS and Cooja Simulator

Speaker: Mrs.Sharwari S.Solapure Mtech(C.S.E) Ph.D(Pursuing)

Research Scholar, GIT, Belgavi, ISOC- RD-SIG Board Member (Institutional Commission

Head),

Date: 23 and 24 December 2020



Participants Statistics

Faculty: 02, Students: 62

Program Brief

As a part of the WCM (Wireless Communication- 16TE7DCWCM) guest lecture, a workshop on "IoT Programming using Contiki OS and Cooja Simulator" was held on 23rd and 24th of December 2020. The first day was about the theory of IoT and the Cooja simulator installation. The definition of IoT, IIoT and Sensor networks were explained in the 1st day. The IoT adoption was explained after the terms with a graph showing the rate of adoption almost achieving 100% by the year 2030.Later the key applications of IoT were briefed through. A pictorial representation of a Smart world was explained with IoT adoption. The IoT protocols along with Hardware used were explained later. After the detailed explanation of IoT technologies, Speaker started with Contiki OS and Cooja Simulator. The open source OS required either Ubuntu or VMWare (Windows) to run. The first day concluded with the installation guide of the Instant Contiki and students were asked to install it on their PCs for the next day. The second day was the Hands-on of the Instant Cooja OS and Cooja Simulator. The session started at 11:15 and few doubts were clarified on the installation of the Contiki OS and Cooja Simulator. The session started off with the simulation of a network of 6 nodes where one node was made as the receiver and the other nodes as senders. The nodes were configured as Z1 motes. The whole network was configured to simulate a sensor network where the receiver node was configured to take temperature data from the sender nodes. Madam briefed on the IoT modules and packages which can be used in a real-life scenario. Few students had some doubts during the demonstration and the speaker could clarify their doubts. After the demonstration of the network, there was an analysis performed on the data sent and received by the nodes. After the demonstration and analysis, in continuation to the demonstration further she explained the possibilities of this tool in IoT Research and projects. The workshop was very informative and useful for every student. The workshop was concluded with a vote of thanks by Rajeshwari ma'am and many students thanked her for conducting the workshop

Outcomes:

- 1. Students got to know about the simulation of sensor network to measure temperature
- 2. Data analysis using Cooja Simulator

ELECTRONICS AND TELECOMMUNICATION ENGINEERING



A Report On

Programming in 'C'

One month – Online program (30 Sessions)

An extended Induction Program by the Coding Club

10 th May, 2021 - 30 th June, 2021

Faculty mentors

Dr. B. Kanmani

Dr. Prasanna Kumar MK

Dr. Balachandra K

C PROGRAMMING INTERSHIP

For the seminar based on internship course, we have taught our juniors about C programming, and also about Arduino using C programming.

Team

There were 12 members in our C programming team divided into 2 groups of each where each group were responsible for teaching a particular unit. We had a detailed plan as to how we were supposed to approach the students ie by assuming that had no prior knowledge of the subject they were being taught.

Below is the poster and the team members who were included in the C programming team.



Chapters

The below image shows the chapters that were assigned to each team.

Amogh BMS

Chap1: lakshya and archismann(Introduction to programming- Ex1)

Chap2: Nikhil and Madhu(DECISION CONTROL AND LOOPING STATEMENTS-Ex

2)

Chap3: keerthana and Supriya(functions and arrays)

Chap4: Chaitanya and Siddarth(Strings and Structures- Ex 7 & 8)

Chap5:wakhee and vinay(pointers and file processing exp 9 and 10)

Chap6: Vishnu and amogha(applications of C and Arduino using C)

8:14 BW

Blow up syllabus

INTRODUCTION TO PROGRAMMING UNIT -1

[8 hours]

Introduction to computer software, Program Design Tools | Algorithms, Flow Charts, Pseudocodes , Structure of a C program, Writing the first C program, Keywords, Identifiers, Basic Data Types in C, Variables, Constants, Input / Output Statements in C. Operators in C-Arithmetic, Relational, Logical, Conditional, Type conversion and Typecasting.

UNIT -2

DECISION CONTROL. AND LOOPING STATEMENTS

[7 hours]

. Conditional branching statements, if, if-else, if-else-if and switch statements, lferative statements, while, do-while and for loop statements, Nested loops, the break and continue statements.

UNIT-3

FUNCTIONS AND ARRAYS

[7 hours]

Functions: Function Declaration/Function Prototype, Function definition, Function call and return statement, passing parameters to functions.

Arrays: Declaration of arrays, accessing elements of the array, storing values in arrays, operations on 1-d arrays - Insertion, deletion, searching, two-dimensional arrays, operations on two-dimensional arrays - addition, subtraction.

UNIT-4

STRINGS AND STRUCTURES

[7 Hours]

Strings: Introduction, String operations – finding the length, converting characters of a string into upper case and lower case.

Structures: Introduction to Structures, Copying and comparing structures, Nested structures.



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UNIT-5

POINTERS AND FILE PROCESSING

[7 hours]

Pointers: Introduction to Pointers, Declaring pointer variables, passing arguments to function using pointers.

File Processing: Introduction to Files, Read Data from Files, Writing data to Files.

<u>Unit 6</u>: Applications of C programming

Introduction to Microcontrollers, 8051, architecture of 8051, Basics of Arduino, Understanding the components, Introduction to moth bot, understanding the mechanics of moth bot, coding moth bot from beginning in Arduino IDE.

List of programs and mini projects conducted

Concepts of Programming in C Lab

1	Develop a program to find the largest of three numbers.
2	Develop an interactive program to calculate roots of quadratic equation by accepting the coefficients.
3	Develop a program to sum the series: $1/1! + 4/2! + 27/3! + \dots$ using functions.
4	Develop a program to insert a number at a given location in an array.
5	Implement a program to perform a binary search on 1D sorted Array.
6	Develop a program to read a two dimensional array "marks" which stores marks of 5 students in three subjects. Display the highest marks in each subject.
7	Develop a program to concatenate two strings and determine the length of the concatenated string.
8	Develop a program to read and display the information about a student using structures.
9	Implement a program to enter a character and then determine whether it is a vowel or not using pointers.
10	Develop a program to read data from the keyboard, write it to a file called "Input". Again read the same data from the "Input" file and display it on the screen.



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Mini Projects

1	Implement a commercial calculator to solve simple computational problems using arithmetic expressions (without using built-in math function).
2	An electricity board charges the following rates for the use of electricity: for the first 200 units 80 paise per unit: for the next 100 units 90 paise per unit: beyond 300 units Rs. 1 per unit. All users are charged a minimum of Rs. 100 as meter charge. If the total amount is more than Rs. 400, then an additional surcharge of 15% of total amount is charged. Develop an application to read the name of the user, number of units consumed and print out the charges.
3	Design and implement an interactive application to calculate Semester Grade Point Average (SGPA) of a student in a Semester End Examination (SEE).

List of participants

List of parti	<u>cipuits</u>		
name	email		
Navneet Ujjain	navneet.te20@bmsce.ac.in		
Karan Singh	karansingh.te20@bmsce.ac.in		
Sauravi Kulkarni	sauravi.te20@bmsce.ac.in		
Harshitha Aparna	harshitha.te20@bmsce.ac.in		
Sanjay Teja YS	sanjay.te20@bmsce.ac.in		
Mukund			
Vahinipathi	mukund.te20@bmsce.ac.in		
Akhil MM	akhil.te20@bmsce.ac.in		
Divit Kanath	divit.te20@bmsce.ac.in		
Tripti			
Shyamdasani	tripti.te20@bmsce.ac.in		
Ananya Hebbar	ananya.te20@bmsce.ac.in		
S Jayashree	sjayashree.te20@bmsce.ac.in		
Anagha Venkatesh	anagha.te20@bmsce.ac.in		
S Manasa			
Garima Prajapati	garima.te20@bmsce.ac.in		
Lakshmi priya G S	lakshmi.te20@bmsce.ac.in		
Tharanga shetty	tharanga.te20@bmsce.ac.in		
S Manasa	manasa.te20@bmsce.ac.in		
Hamsapriya J L	hamsapriya.te20@bmsce.ac.in		
Spoorthi M N	spoorthi.te20@bmsce.ac.in		
Ananya Kiran	ananyak.te20@bmsce.ac.in		
Surabhi S	surabhi.te20@bmsce.ac.in		
Neha.B	neha.te20@bmsce.ac.in		
Yash Pendse	yash.te20@bmsce.ac.in		
Ananya Srinivas	ananyas.te20@bmsce.ac.in		
Pallavi G	pallavi.te20@bmsce.ac.in		
Chiranjeevi Vasant	chiranjeevi.te20@bmsce.ac.in		
Sreevidya M S	sreevidya.te20@bmsce.ac.in		
Aayushi verma	aayushi.te20@bmsce.ac.in		
Aakash Bari	aakash.te20@bmsce.ac.in		
Vibha S	vibhas.te20@bmsce.ac.in		
Sai Rupesh L	sairupesh.te20@bmsce.ac.in		
Lasya G Patel	lasya.te20@bmsce.ac.in		
Ramakrishneswarn			
ath gotur R	ramakrishneswarnath.te20@bmsce.ac.in		
Sahana S L	sahana.te20@bmsce.ac.in		
		_	 -

Topics

• Applications of C programming

For this we implemented a small game so that the students got to know the real life application of C programming. So we hardcoded the game tic tac toe using online IDE, the students got to see the logic behind application based problems and also got to see how important debugging is. In the end we showed them the output.

About Arduino

We taught the students about the basics of Arduino and microcontrollers which was pretty detailed. The students had doubts which we clarified on the spot.

• Building a moth bot using Arduino in c programming language

Moth bot is light driven bot which uses LDR and couple of servo motors to function, so we explained the basics of LDR and servo motors to the students so that they could grasp when they were used in code. Then we implemented the code in Arduino IDE.

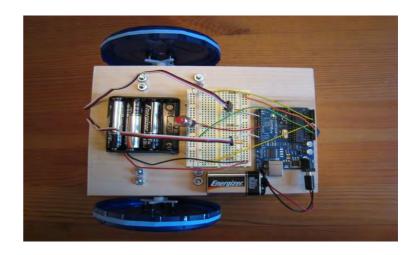
• Discussion and further application of Arduino using C programming

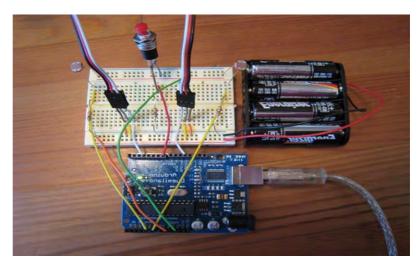
For the last part of this chapter we had a lively interaction where we asked the students to tell us few applications of C programming using Arduino ie IOT and they were able to come up the topics in no time stating they understood the topics we taught them.

Application of C programming

Moth Bot

This is the offline image of a moth bot which we used to explain.





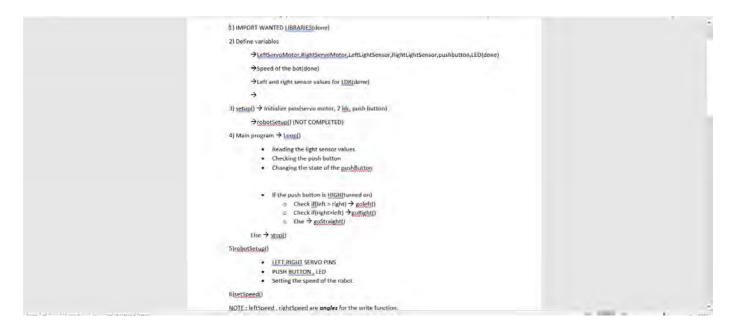
Coding part

We implemented the code in Arduino IDE which was quiet challenging since the IDE was new to the students. We used as many comments and real life variables to make it easier for the students to understand. You can see a snippet of our code below. I have also provided the link to my code which I hardcoded.

https://create.arduino.cc/editor/vishnupranavr/ee05f507-0eb4-4ed8-857b-6bbd3030c9ec



I also used a word document where I wrote down my entire approach so that they can understand the logic and plan that is required to approach any project. This is shown in the below image.



Experience of the course from a student

• This was the first time I ever taught a class

It was pretty new and fresh experience for me where I had use my presentation skills in a different manner. It had to warm up the small crowd before I began as it would set a good environment to learn. I also got to experience what my teachers experience while they are teaching and how important interaction is in a class.

Knowledge about the subject

I had prior knowledge about Arduino and C programming as I had learnt it in my previous semesters. When I got to implement it on my own my hold on the subject increased tremendously as I decreased making errors and also my debugging skills improved.

Improving my own skills

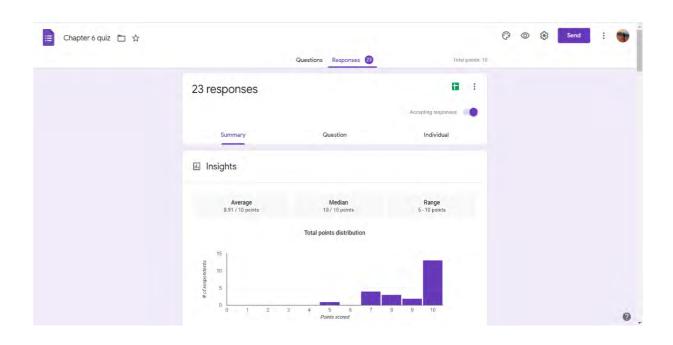
This was one of the main reasons I took this internship cause I know it might come in handy for me in my later days. My C skills have improved as I am much more familiar with the functions and syntax. I am also aware of the areas where they can be applied.

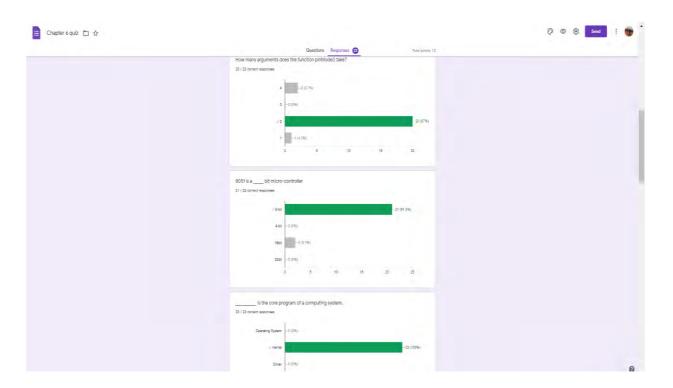
• Getting feedback from the students

We gave quiz to the students where they were pretty comfortable in answering all the questions so we can say that they have pretty good grasp on the subject and they will be able to implement any project in C language. In the end we had a lively discussion about our teaching and they gave us a positive feedback.

Snapshots of the quiz conducted

Average result:





ONLINE WORKSHOP-EVENT REPORT

EXTENDED INDUCTION PROGRAM

BMS COLLEGE OF ENGINEERING DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

EXTENDED INDUCTION PROGRAM-EVENT REPORT

NAME OF THE EVENT: ONLINE WORKSHOP ON ELECTRONICS

SIMULATION MULTISIM-LIVE

DATE OF CONDUCT:15, MAY 2021 and 22, MAY 2021

LOCATION OF THE EVENT: GOTOMEETING APPLICATION

NUMBER OF STUDENTS ATTENDED: 43

WORKSHOP HANDLED BY: PROF. ARCHANA.K AND PROF. AMBIKA. K

SPONSORING ORGANIZATION: DR. KANMANI.B

(DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION)

EVENT TIME: 4:00-5:30 PM

MAIN OBJECTIVE OF THE PROGRAM: To impart technical knowledge and give hands-on experience on the topic electronics simulation tool- multisim live.

Moreover, this workshop was not only restricted to electronics branch student but also for other branch students to gain this skill.

EXECUTIVE SUMMARY OF THE EVENT:

- A brochure was made to invite the students and give more details about the event.
- A list of interested student with their details were collected.
 This data was saved in Google spreadsheet.
- A link for the meeting on GoToMeeting was shared to the students prior to the meeting.

Day 1:

15 May, 2021

TIME:4:00-5:30PM

The event was inaugurated by **DR.KANMANI.B.**



This session was handled by professor ARCHANA.K.

In the 90mins of the session, she successfully imparted her knowledge on electronics and made it quite simple and interesting for the students.

She guided us throughout the signing up process for the **MULTISIM SIMULATION -TOOL** available on the internet.

This meeting was also recorded and will also be shared to all the students.

Further in the session, following topics were covered using the simulation multisim tool:

- (1.) Forward and reverse bias condition-V-I Characteristics
- (2.) Half wave rectifier
- (3.) Bridge rectifier
- (4.) Zener diode shunt regulator

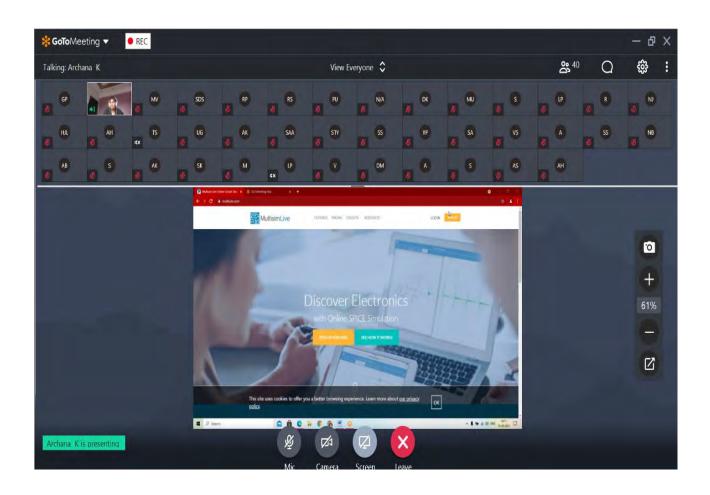
This was followed by a doubt session, wherein students interacted with the professors and cleared their doubts.

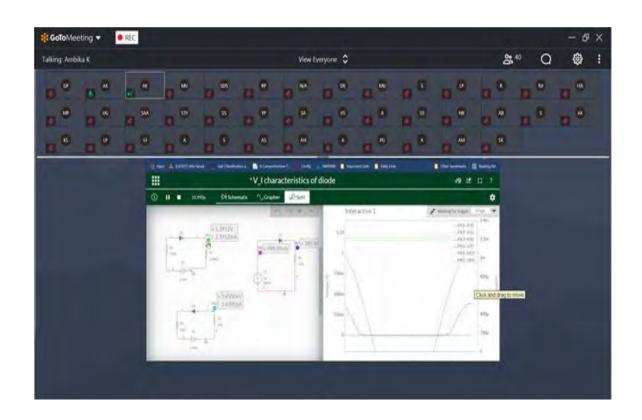
Assignment for the same, was given to the students to practise and clear their concepts and to have more experience with the tool.

Overall, it was a very informative, interactive and a great learning experience for all the students. In this session, students actively participated and performed as per the instructions given by the professors.

Key accomplishments:

- Students enjoyed learning the new concept on circuit simulation in a new way i.e., 'learning by doing' as said by the professor AMBIKA.K
- Not only students from electronics branch learned this, but students from the other branches were also benefitted.
- This was a successful step towards exploring technology for a better future of the students.







DAY 2:

22 MAY,2021

This session was handled by prof AMBIKA.K.

In one and a half hour of the class, she explained us the complete topic of operational amplifiers with hands-on experience of the tool.

The following topics were taught to us:

- Voltage follower
- Inverting amplifier
- Non-inverting amplifier
- Added circuit

This was followed by a brief explanation of sub-topics with representation on the multisim tool. The output we got in the experiments were explained to us in detail.

The session was made very interactive by a doubt session. She also made sure that we enjoyed and learned the things simultaneously.

We were given an assignment for gaining better hands-on experience on using the tool.

Overall, the students successfully learned using this tool.

Key accomplishments:

- This course was successfully completed with a beneficial skillset added to the student's profile.
- Students are now really interested to learn more about these topics further.





FEEDBACK BY THE STUDENTS REGARDING THE EVENT:

Please share your thoughts about the session. *

It was a wonderful experience, never knew it could be this easy Good.

It was interesting.

It was good.

Good information.

It was fun and will be easy to understand the theory part. Looking forward to more such activities.

It was very interesting to learn this software to solve problems.

It was interesting to make circuit by own.

Was Informative.

It was very interesting and also engaging as we create circuits and also get outputs from it. It was great having our teachers guide us through this session. Good, productive and informative.

Very nice.

I was awesome.

It was good.

It was very interesting. The session was very interactive and got to learn new stuffs.

Enjoyed learning new circuits.

The session was very informative and helpful. Got to learn something new.

How do you think this session could have been improved?*

Might need more sessions like these.

It's fine.

No need of improvement.

No idea.

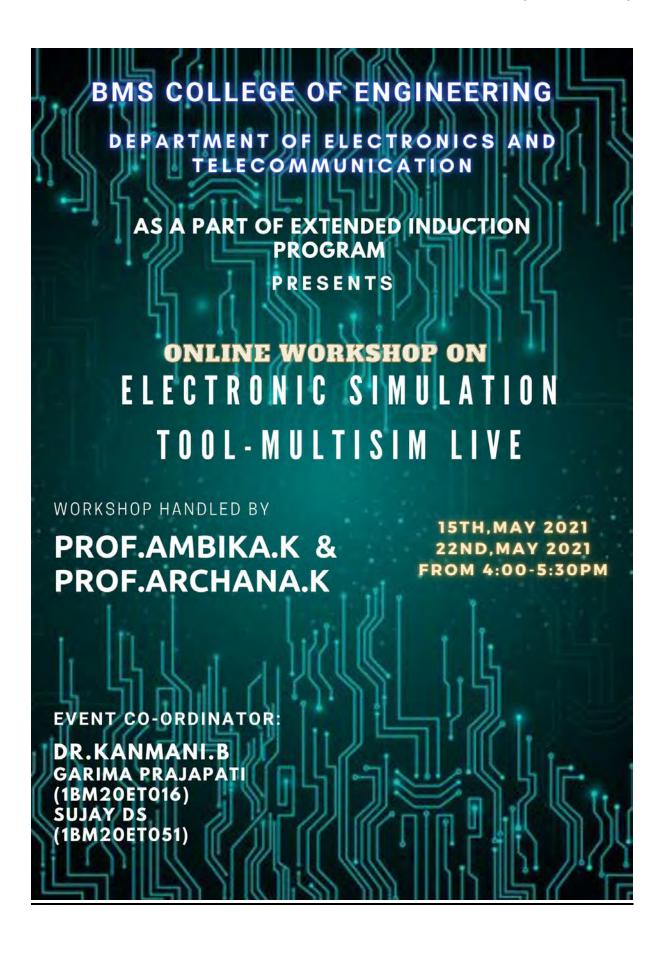
I think it was all good.

By going a little slow.

I think it's already good.

On behalf of the student community, I would like to thank DR. KANMANI.B, Prof. ARCHANA.K and Prof. AMBIKA.K for organizing and taking such a wonderful session. We hope to have sessions like this in the future as well.

Prepared by: Garima Prajapati





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(An Autonomous institution, Affiliate to VTU)

REPORT ON TEQIP-III SPONSORED ONE-DAY WORKSHOP ON

"Awareness on Cyber Security-Industry Perspective"

A workshop was organized on 22nd December 2020 on "Awareness on Cyber Security-Industry Perspective" in collaboration with in association with Hewlett Packard Enterprise incubation centre on Virtualization and Data Security.

Event Duration: 10:30 AM to 4:00 PM
 Venue: Online Mode – Go to Meeting.

3. Resource person:

Session 1: Mr. Srinivas Naika, Quality Automation Specialist from Royal Bank of Scotland Business Session 2: Mr. Muralikrishna Nidugala and Mr. Pradhyumna Padhan from Hewlett Packard Enterprise

4. Participants: Total of 138

Faculty: 19 (Internal:1, External:18) Research Scholar: 3 (External:3) PG Students: 4 (Internal:4)

UG Students: 112 (Internal: 50, External: 62)

The workshop was inaugurated on 22nd December 2020 with a total of 168 participants across different colleges.

Following were the contents covered in the one day workshop:

Day	Topic	Resource Persons	Time
22 nd December, 2020	Cyber Security Awareness	Mr. Srinivas Naika, Quality Automation Specialist from Royal Bank of Scotland Business	10:00 A.M to 1:00 PM
22 nd December, 2020	Industry Case Studies on Cyber Security	Mr. Muralikrishna Nidugala and Mr. Pradhyumna Padhan from Hewlett Packard Enterprise	2:00 PM to 4P.M

The following outcomes were achieved during the one-day workshop.

- To provide awareness to UG/PG/Ph.D./Faculty on Cyber Security
- Learn the basic concepts of Cyber Security, Threats in the e-world.
- Understand the attacker's mind and hacking tools and techniques.
- Develop familiarity and deep understanding of hacking mechanisms.
- Learn the best practices to protect one's own data from the attacker's world.

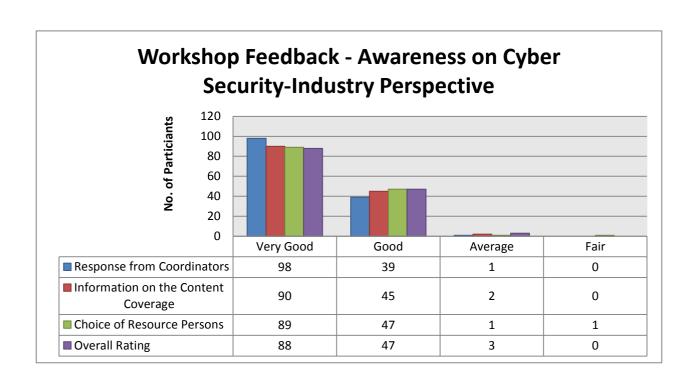
The workshop concluded with the valedictory on 22nd December 2020 by HOD, Dept.of ISE, BMSCE and the Programme Coordinator Dr. R. Ashok Kumar, Gururaja H.S, Dr. N. Sandeep Varma. The participants gave the feedback on the programme.







The feedback statistics from the participants of the workshop is depicted below:





Autonomous Institute, Affiliated to VTU

Department of Information Science and Engineering

Name of the Activity: **Building APIs using the tool postman Workshop** Objectives:

- 1. To explore the importance of API Calls
- 2. To understand how client server architecture works.
- 3. Explore Various types of API calls/request.

Date, Time Venue of the Activity: 22nd May 2021, Saturday, 11:00 A.M – 1:00 P.M Online:

https://zoom.us/j/99964924346?pwd=d1Fqd1pSbkpvczFIR0hKUlc0YXE5UT09

Name and details of collaborating agency (if it is collaborative/joint activity): **POSTMAN, India.**

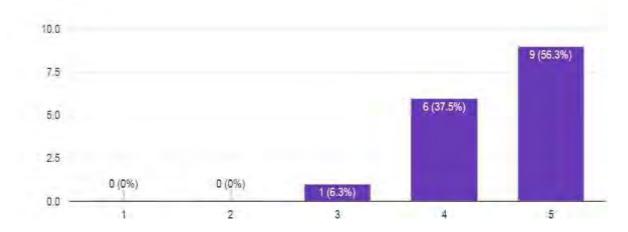
Brief summary of the Programme

The work is conducted for UG Students on Web Technologies The workshop is organized to provide hands on experience on POSTMAN API, which is necessary and essential tool for a web developer. It helps in understanding how data is moving from client to server and fetch data from various API Sources and use them as a part of Web Development.

Outcomes: Feed from the participants was collected on a scale of 1 to 5 (1 being poor to 5 being excellent).

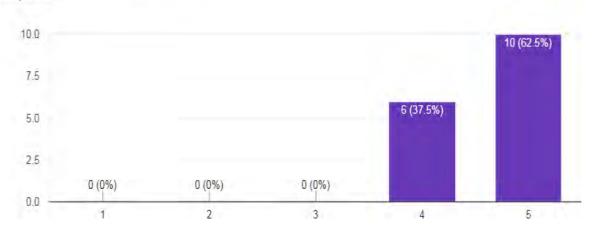
Workshop Objectives were stated clearly and met

16 responses



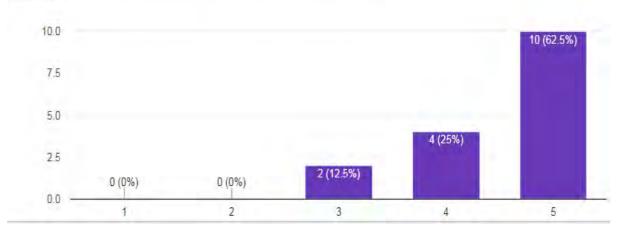
The workshop was well organized

16 responses



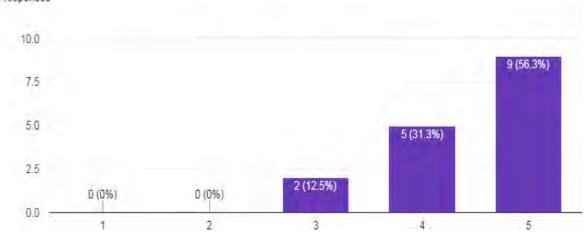
The information or skills presented were relevant and useful

16 responses



The basic Concept of API is Well Explained to build/use scalable API's

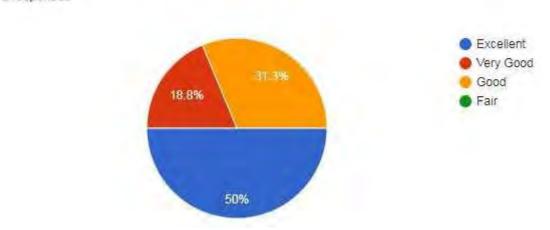
16 responses



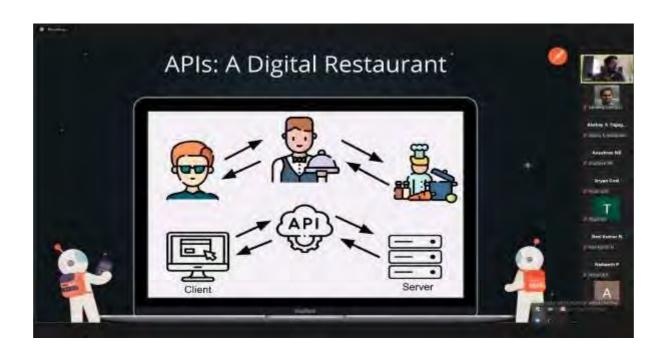
The workshop helped to increase you knowledge on Web APIs Usage in Real Time Web development Process 8 6 4 2 0 0(0%) 0 (0%) 1 (6.3%) 1 2 3 4 5

Overall rating of the Workshop

16 responses









Autonomous Institute, Affiliated to VTU

Department of Information Science and Engineering

Name of the Activity: Training of Future Skills Technologies: Cyber Security Objectives:

- 1. To provide awareness on the future skill technologies as a part of National Initiative by Govt. of India
- 2. To provide training to Engineering graduates on Cyber Security.

Date, Time Venue of the Activity:

Start Date : **August 17-08-2020.** End Date : **November 20-09-2020** Mid Term Assessment Date : **11-10-2020**

Venue : Online (Google Meet and Zoom) :

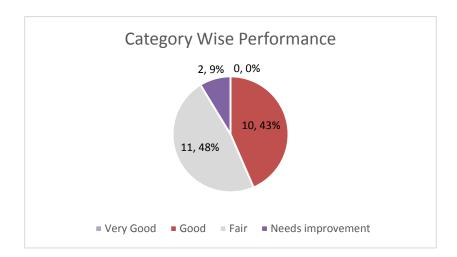
https://zoom.us/j/95836842019?pwd=TWJITG9Gb1dxZmIrU2Z2M0d5eDQ2Zz09

Name and details of collaborating agency (if it is collaborative/joint activity): TEQIP-III/ NAASCOM

Brief summary of the Programme: The institute nominated faculty to be trained at IIT Roorkee for a period of two weeks on Cyber security. The objective of the programme is to train the undergraduate students of the institute for a period of two months as per the curriculum issued by IIT Roorkee. The programme is assessed by NASSCOM testing agency and few students cleared the midterm assessment. Initially 80 participants joined the course and only 35 appeared for the mid—term assessment and out of which 23 students qualified. However, the mid-term assessment is not considered for the final assessment and is conducted to check the progress of the programme and students.

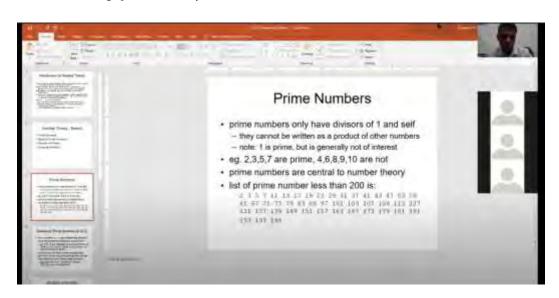
Outcomes

- 1. Learn valuable security principals of cyber security.
- 2. Implement proper procedures for data confidentiality and availability.
- 3. Develop critical thinking and problem-solving skills using real time tools and mathematical modelling.



Category Wise		Levels	Average Overall Score (Part A+B)
Very Good	0	Very Good	>75%
Good	10	Good	51%—75%
Fair	11	Fair	26%—50%
Needs improvement	2	Needs improvement	<=25%

j) Two or three relevant Photographs of the activity





NASSCOM Assessment of Competence—Technology TEQIP III Mid-Term Assessment

SCORE CARD

Registration ID	NACT1020KAAAM00024	
Name	Apoorva R Shekhar	
Date of Birth	28/5/1998	
Name of College	BMS College of Engineering Bangalore	
Test Location	BMS College of Engineering Bangalore	
Test Date	Oct 11 2020	

CYBER SECURITY—TEST SCORE

Skill	Max Score	Your Score	% Score	College Percentile
Fundamentals of Computer Networks	8	6	75%	74%
Network Layers	23	13	57%	78%
Protocols and Cyber Security Vulnerabilities	29	11	38%	43%
Essential for understanding cyber security	40	30	75%	91%
Total Score	100	60	60%	83%

a) Attendance sheet

Unique Id	Email ID	Candidate Name	College Name	Gender
NACT1020KAAAM00012	shravankumar.ec18@bmsce.ac.in	SHRAVANKUMAR	BMS College of Engineering	Male
NACT1020KAAAM00009	nehalraj.ec17@bmsce.ac.in	S D NEHAL RAJ	BMS College of Engineering	Male
NACT1020KAAAM00007	vineeth.ec17@bmsce.ac.in	Vineeth Krishna R	BMS College of Engineering	Male
NACT1020KAAAM00003	rakshithp.ec17@bmsce.ac.in	Rakshith P	BMS College of Engineering	Male
NACT1020KAAAM00033	sanjeevkumar.cs18@bmsce.ac.in	Sanjeev Kumar Singh	BMS College of Engineering	Male
NACT1020KAAAM00008	arjun.cs18@bmsce.ac.in	Arjun A.S	BMS College of Engineering	Male
NACT1020KAAAM00024	apoorvar.scn19@bmsce.ac.in	Apoorva R Shekhar	BMS College of Engineering	Female
NACT1020KAAAM00014	chetanapatil.scn19@bmsce.ac.in	Chetana Patil	BMS College of Engineering	Female
NACT1020KAAAM00039	rakshithap.scn19@bmsce.ac.in	Rakshitha	BMS College of Engineering	Female
NACT1020KAAAM00026	harshita.is18@bmsce.ac.in	Harshit Aiyappa M N	BMS College of Engineering	Male
NACT1020KAAAM00036	harshithag.ec17@bmsce.ac.in	Harshitha G	BMS College of Engineering	Female
NACT1020KAAAM00010	varshar.scn19@bmsce.ac.in	Varsha R	BMS College of Engineering	Female
NACT1020KAAAM00021	rajesha.ec18@bmsce.ac.in	Rajesha T	BMS College of Engineering	Male
NACT1020KAAAM00013	triveniy.cs19@bmsce.ac.in	Triveni Y	BMS College of Engineering	Female
NACT1020KAAAM00004	harshith.ec17@bmsce.ac.in	Harshith H	BMS College of Engineering	Male
NACT1020KAAAM00001	rohan.ec17@bmsce.ac.in	Rohan Sathish	BMS College of Engineering	Male
NACT1020KAAAM00005	dhruv.cs18@bmsce.ac.in	Dhruv Agrawal	BMS College of Engineering	Male
NACT1020KAAAM00028	rachanar.scn19@bmsce.ac.in	Rachana R Sanni	BMS College of Engineering	Female
NACT1020KAAAM00002	yashas.ec17@bmsce.ac.in	Yashas H S	BMS College of Engineering	Male
NACT1020KAAAM00027	preetipk.ec18@bmsce.ac.in	Preeti Pandurangasa Katwa	BMS College of Engineering	Female
NACT1020KAAAM00029	swathiv.cs19@bmsce.ac.in	Swathi V	BMS College of Engineering	Female
NACT1020KAAAM00031	jamunacj.scn19@bmsce.ac.in	Jamuna C J	BMS College of Engineering	Female
NACT1020KAAAM00017	navaneeth.ec17@bmsce.ac.in	Navaneeth KS	BMS College of Engineering	Male

b) Relevant Circulars/Brochures etc



B.M.S. College of Engineering, Bangalore (Autonomous Institute, Affiliated to VTU)

TE**Q**IP-**3**

We cordially invite you for the inauguration of TEQIP-III Sponsored Training Program

on

"Training of Future Skills Technologies: Cyber Security"
August 17th to November 20th , 2020

Jointly Organized by:

Department of ISE, CSE and ECE, BMSCE

Inauguration: 18th August, 2020, 9:30 A.M

Venue: Online

ALL ARE WELCOME



Autonomous Institute, Affiliated to VTU

Department of Information Science and Engineering

CURE THE CODE

Objective:

The main aim of the event was to test the participant's ability to debug the 10 challenge programs that were given to them as well as testing their grasp over C++ and Python.

Date of the Event:

The event was conducted on 12th October,2020 and was part of the series of events conducted for IEEE day which was celebrated on 12th and 13th of October.

Name of the Collaborating Agency:

This event was conducted in collaboration with the IEEE Student Branch Chapter of BMS College of Engineering.

Brief Summary of the Programme:

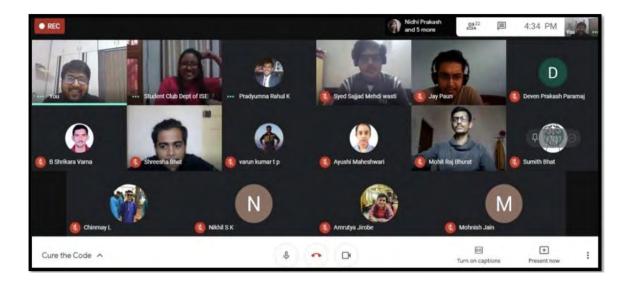
The I.S.E Student Club in collaboration with IEEE chapter of BMS College of Engineering, organized A Debugging Contest where the participants had to debug 10 challenging problems given to them in C++ and JAVA. The event was organized on 12th October and was part of the series of events conducted for IEEE day which was celebrated on 12th and 13th of October.

OUTCOME: -

Sumith Bhat and Swaroop Kumar were adjudged the winner and the runner-up for the event. An after event virtual meeting was held where the I.S.E. Student Club coordinators interacted with the participants and addressed various queries along with gathering valuable feedback.

REGISTRATIONS: -

There were 51 registrations in total for the event.



Autonomous Institute, Affiliated to VTU

Annual Quality Assurance Report 2020-2021 (AQAR)
Period - 01.06.2020 To 31.05.2021

5.1.3 The following Capacity Development and Skill Enhancement activities are organised for improving students' capabilities tec nology 1 Soft skills, 2. Language and communication skills, 3. Life skills (Yoga, physical fitness, health and hygiene) 4. Awareness of trends in

				1222	Name of the Capacity Development and Skill Enhancement programme
				22-02-2021	Year of implementation (DD/MM/YYYYY)
				1110	Number of students enrolled
JV Global	ETHNUS	Go Cyber Security	ACHARYA	1110 Genesis	Name of the agencies/consultants involved
9886096821	9686531186	945683265	9980370513	9945164009	Contact details of agencies/ consulltants involved
& Placement	9686531186 Department of Training				Dept

Keyort of Capacity Develop	Supporting Documents	
Capacity Development and Skill Enhancement activities		



	В	MS COLLEGE OF ENGINEERING, BENGALUR Autonomous Institute, Affliated to VTU	RU				
Training - Module for 6th semester (Verbal ,Logical, Quants &Soft skills)							
S.No V	/ertical	Topic	Duration (Hours)				
12		Subject Verb Agreement					
13	Verbal	Antonyms, Synonyms, Sentence Completion	7 Hours				
14		Reading Comprehension					
8		Coding decoding, Clocks and calenders					
9	Logical	Syllogisms , Cryptarithmetic	8 Hours				
10	Logical	Direction sense, Blood Relation	8110013				
11		Revision for Logical					
1		Speed Maths, Number system, Probability					
2		Time, speed and distance, Time and Work					
3		Averages and Mixtures					
		Problems on ages					
4	Quants	Percentages, SI, CI	15 Hours				
5		Permutations and Combinations					
		Profit and Loss					
6		Ratio & Proportion , Mixture & allegations					
7		Revision for Quants					
15		Resume Writing , Email writing					
16		Personal Interview Skills & Grooming					
17		Personal Interview Skills (Tech Faq discussion)					
18	Soft skills	Personal Interview Skills (HR Faq discussion)	20 Hours				
19		Self Awareness					
20		Group Discussion and Sample GD					
21		Team Building & Leadership					
	***	Total Duration	50 Hours				



		BMS COLLEGE OF ENGINEERING, BENGALU	RU
		Autonomous Institute, Affliated to VTU	
	Training - M	odule for 4th semester (Verbal, Logical, Qua	nts & Softskills)
S.No	Vertical	Topic	Duration (Hours)
1	Verbal	Parts of speech	10 Hours
2		Preposition	
3		Articles	
4		Active Voice & Passive Voice	
5		Sentence Construction	
6		Tenses	
7		Reading Comprehension	
8		Synomyms & Anotnyms	
9	Logical	Directions	10 Hours
10		Blood Relations	
11		Data Interpretation, Data arrangement	
12		Data sufficiency	
13		Clocks ,Calenders	
14		Puzzles, Number and Letter series	
15	Quants	Ratio and Proportion	6 Hours
16		Percentages	
17		Problems on Ages	
18		Profit and Loss	
19		Number systems	
20	Soft skills	Resume Writing	4 Hours
21	SOIT SKIIIS	Email writing	
	Total Duration		30 Hours





Autonomous Institute, Affiliated to VTU

Report on Webinar on Immunity boosting- A Wellness Program"

Name of the Department: Department of Biotechnology and Department of Medical Electronics, B.M.S. College of Engineering, Bangalore.

Name of the activity: "Immunity boosting- A Wellness Program"

Objectives: Recent pandemic caused by the novel coronavirus (COVID-19) has made us rethink about our behaviour towards the life and the way of living. Ayurveda, an ancient medical science has been the secret of India's wellbeing and health.

Date, Time Venue of the activity: 28th 30th Dec 2020

Name & details of collaborating agency: Prameya health care and Herbal technologies, Bangalore.

Brief summary of the Programme: The current pandemic has led us to reconsider the traditional and herbal approaches which had been existed in India since ages. The ancient medicines have solutions for prevention and/or cure of chronic as well as acute diseases. Increasing the immunity so as to have the natural defence mechanism against the pathogens, can be one of the ways to prevent the infections.

Outcomes: A total of 50 participants took part in the session. Feedback was collected and the workshop was appreciated.

Number of Participants: 50

a) Number of Faculty: 4







Autonomous Institute, Affiliated to VTU



Eminent Speakers



Dr Sandhya Ravi Consultant Breast Surgeon Managing Director

Prameya Health Pvt Ltd, Bangalore

Topic: "How to strengthen our Immunity: Scientific insights" Date and Time: 28.12.2020, 4-5 PM

Dr. Swathi Raghavendra

Masters in Yoga

Yoga therapist

Prameya Health Pvt Ltd, Bangalore

Topic: "Mental and Physical health for wellness"

Date and Time:29.12.2020, 4-5 PM



Dr. Lalitha Priva Consultant Nutritionist

Dietician and Weight Management Specialist

Prameya Health Pvt Ltd, Bangalore

Topic: "Balanced food: Do's and don'ts in our eating habits" Date and Time: 30.12.2020, 3-4 PM



Dr. M. Anuradha Principal and Professor

Padmashree Institute of Management and Sciences, Bangalore

Rishi Herbal Technologies Pvt. Ltd., Bangalore

Topic: "Immunocompromised:Reasons and nutraceutical solution" Date and Time: 30.12.2020, 4-5 PM

Coordinators: Dr. Vijayalakshmi. K. Professor and Head Department of Medical Electronics B.M.S College of Engineering, Bangalore 19

2. Dr. M.S. Suma Professor Department of Medical Electronics B.M.S. College of Engineering Bangalore -19

3. Dr. Savithri M Bhat Professor Department of Biotechnology B.M.S. College of Engineering Bangalore –19 **Healthy Recipe Contest**

Registered participants can take part in the contest by uploading a video of home-made healthy food recipe. The video link will be provided via email to all the registered participants. The prize winners in Faculty and student category will be announced on

the last day of workshop session, 30th Dec, 2020.

Registration is free and E-certificates will be provided. Please register through the google form link provided below.

https://docs.google.com/forms/d/1nB-PfW2ujsnBpoIRct4Aavtz3Ws3Is3rresEdqQDX0Q/edit

4. Dr. Rashmi S Shenoy Assistant Professor Department of Biotechnology B.M.S. College of Engineering Bangalore -19



Autonomous Institute, Affiliated to VTU

Report on Webinar on Recent Advances in Drug Discovery and Pharmaceutical Sciences

Name of the Department: Dept of Biochemistry, IADC-A and Dept of Biotechnology, Department of Biotechnology, B.M.S College of Engineering

Name of the activity: "Recent Advances in Drug Discovery and Pharmaceutical Sciences"

Objectives: Dept of Biochemistry, IADC-A and Dept of Biotechnology, Department of Biotechnology, B.M.S College of Engineering in collaboration with Indian Women Scientist Association, Bengaluru branch organized a International Webinar on "International Webinar Series on ""Recent Advances in Drug Discovery and Pharmaceutical Sciences"

Date, Time Venue of the activity: 7th – 10th Oct 2020

Schedule of the Webinar series:

- Dr. Priyanka Baloni, Scientist, Institute for Systems Biology, Seattle, USA Topic "Metabolic Markers in Diseases" Date and Time: 07.10.2020, 11 AM
- 2. Dr. Upasana Ray, Senior Scientist, Infectious Diseases and Immunology, CSIR-IICB Translational Research Unit of Excellence, Kolkata

Topic: "Vaccine strategies: A COVID-19 perspective"

Date and Time: 07.10.2020, 4 PM

3. Dr. Pavithra Viswanath, Associate Professor, Dept. of Radiology and Biomedical imaging, University of California, San Francisco, USA

Topic: "Exploiting Metabolism for Imaging and Therapy for Brain Tumors"

Date and Time: 08.10.2020, 11 AM

- 4. Dr. Kavyashree Manjunath, Former Women Scientist, Instem, Bangalore Topic: "Structural Biology in Drug Discovery and Vaccine Development" Date and Time: 09.10.2020, 4 PM
- 5. Dr. Anjali Pai, Scientist and Integrator, PhD University College Cork Topic: "Cancer Biology and Drug Targets"

Date and Time: 10.10.2020, 11 AM

Name & details of collaborating agency: Indian Women Scientist Association, Bengaluru branch



Autonomous Institute, Affiliated to VTU

Brief summary of the Programme: The first speaker was Dr. Priyanka Baloni, Research Scientist, Institute for Systems Biology, Seattle, USA. She talked on the topic: "Metabolic Markers in Diseases" on 7th Oct 2020 at 11:00 am. She discussed about metabolic markers in Alzhemer's disease and role of diet on metabolism. She talked about how expression data is incorporated into genome wide metabolic models to understand and predict metabolic markers in disease. The second speaker was Dr. Upasana Ray, Senior Scientist, Infectious Diseases and Immunology, CSIR-IICB Translational Research Unit of Excellence, Kolkata on 7th Oct 2020 at 4:00 pm. She talked on the topic: "Vaccine strategies: A COVID-19 perspective". She first discussed about the different types of COVID-19 vaccines and their stages of development. The third speaker was Dr. Pavitra Viswanath, Associate Professor, Dept. of Radiology and Biomedical imaging, University of California, San Francisco, USA. She talked on the topic "Exploiting Metabolism for Imaging and Therapy for Brain Tumors" on 8th Oct 2020 at 11:00 am. She started her talk with a brief description of the cancer as ahetrogenous and genetic disease. She, then, discussed about the how metabolic imaging of C14 labeled glucose and pyruvate in glioma and glioblastoma can be used for analyzing disease progression and treatment outcomes. The fourth speaker was Dr Kavyashree Manjunath, Former Women scientist, Instem, Bangalore. She spoke on the topic "Structural Biology in Drug Discovery and Vaccine Development" on 9th Oct 2020 at 4 PM. She started her talk by giving brief introduction on structural biology and its importance to study various drug targets. She then discussed on various techniques like X-ray crystallography, NMR etc. used to study the structural details of complex biomolecules. The fifth speaker was Dr Anjali Pai, Scientist and Integrator, from

Outcomes: A total of 70 participants took part in the session. Feedback was collected and the workshop was appreciated

Number of Participants: 70

a) Number of Faculty: 4



Autonomous Institute, Affiliated to VTU

International Webinar Series on

"Recent Advances in Drug Discovery and Pharmaceutical Sciences"

Organized by

Department of Biochemistry NDIAN ACADEMY Degree College - Autonomous



Department of Biotechnology B.M.S College of Engineering



In association with

Indian Women Scientist's Association (IWSA), Bengaluru

Date: 07.10.2020 to 10.10.2020

Dr. Pavitra Viswanath

Eminent Speakers



Dr. Priyanka Baloni Scientist Institute for Systems Biology, Seattle Topic: "Metabolic Markers in Diseases" Date and Time: 07.10.2020, 11 AM



Dr. Upasana Ray Senior Scientist Infectious Diseases and Immunology CSIR-IICB Translational Research Unit of Excellence, Kolkata Topic: "Vaccine strategies: A COVID-19 perspective" Date and Time: 07.10.2020, 4 PM



Associate Professor Dept. of Radiology and Biomedical imaging, San Francisco Topic: "Exploiting Metabolism for Imaging and Therapy for Brain Tumors" Date and Time: 08.10.2020, 11 AM



Dr. Kavyashree Manjunath PhD (HSC, Bangalore) Former Women Scientist, Instem, Bangalore Topic: "Structural Biology in Drug Discovery and Vaccine Development" Date and Time: 09.10.2020, 4 PM



Dr. Anjali Pai Scientist and Integrator PhD University College Cork Topic: "Cancer Biology and Drug Targets" Date and Time: 10.10.2020, 11 AM

Coordinators: 1. Dr. K. Prashanthi Secretary, IWSA Bengaluru Branch Bangalore

2. Dr. Rashmi S Shenov Assistant Professor, Department of Biotechnology B.M.S. College of Engineering Bangalore-19

Convenor Prof. Savithri M Bhat Professor, Department of Biotechnology B.M.S. College of Engineering Bangalore-19

Co-Convenor Dr. Saisha Vinjamuri Assistant Professor, Department of Biotechnology B.M.S. College of Engineering Bangalore-19

Treasurer Mrs. Prathibha N Assistant Professor, Department of Biotechnology B.M.S. College of Engineering Bangalore-19

Registration is free and E-certificates will be provided

https://docs.google.com/forms/d/1VWxIdrr5kOuwTi6HWkWhvGZamvInCWXT-nO9HM51M1E/edit



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