



JUNE TO DECEMBER  
2021

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# NEWSLETTER 2021

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**COMPUTER ENGINEERING DEPT.  
GEC, GANDHINAGAR**



## Message From Our Principal



Dear faculty, staff & students,

To those who see with loving eyes, life is beautiful.

To those who speak with tender voices, life is peaceful.

To those who help with gentle hands, life is full.

And to those who care with compassionate hearts, life is good beyond all measure!"

I Dr. Sweta P. Dave as the Principal of the prestigious educational organization, Government Engineering college of Gandhinagar, with a compassionate heart Invites you to have an Initial peak of our organization's vision & values. Government Engineering college Gandhinagar primarily stands to nurture the shelved potential hidden in the young talent. We intend to provide a platform to the students to let out their creativity and channelize their knowledge and young inspirational energy.

At GEC Gandhinagar, the joyful experience of academics and the energetic bursts of co-curricular activities Integrate to create an all-round experience for fellow students and attendees. Our highly qualified faculties and management makes sure our fellow students become capable to stand out of the competition in the outside world. We believe in not only educating but also empowering our students to make sure they feel like the representatives of our prestigious organization and create meaning experience for them during their time period at the college.

GEC Gandhinagar brings a holistic academic as well as a practical approach for the students to become compatible and knowledgeable to the market needs. And we believe In this statement a lot, our faculties are well qualified and trained to deliver the knowledge in a playful form and not letting students just to mug up.

At last, I want to convey that we focus on the overall development of our students. We also look after the staff members and the college resources to provide students with the highest quality of academics value. I will heartily invite you to join our prestigious organization and become part of our family.

**- Dr. Sweta Dave**  
Principal of GEC, Gn

## Message From Our HOD



The Department of Computer Engineering, established in 2004, has recorded a consistent improvement in its academic, research, and placement performance till now. I am elated to tell you that the department stands on the strength of experienced and well-qualified faculty who are very dedicated to teaching and also involved in the up-gradation of knowledge. Their research experience will help to cultivate the future of our students.

The B.E. Computer engineering program includes computer operations on different languages, data generation, collection and utilization of information.

The course imparts all the basics as well as the latest knowledge pertaining to the rapidly developing field of computers. The course is designed to keep students at pace with the practical field.

The mission of the department is to produce and impart theory, principles, practice, and know-importance of computing in the information age. This is required for the critical analysis, design, evolution, and improvement of the computing system in the context of computers and industry services.

To provide students with a strong foundation in the mathematical, scientific, and engineering fundamentals necessary to formulate, solve and analyze engineering problems and to prepare them for graduate studies.

Design, development, testing, and evaluating computer based systems by applying standard software engineering practices and strategies in the area of algorithms, web design, data structure, and computer network are the Program-specific outcomes.

**- Dr. D. A. Parikh**  
HOD of CE Dept.

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- CodeChef GECC

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## About GEC, Gandhinagar

- Established in 2004, Government Engineering College, Gandhinagar (GEC-Gn) takes pride in its highly motivated students. Our students are life-long assets that help this institute to continuously evolve and work towards its Vision. Approved by AICTE.
- The College is administrated by Directorate of Technical Education, Gujarat State, Gandhinagar. GEC Gn is affiliated to Gujarat Technological University.
- GEC-Gn offers its students a wide range of courses to choose from. This helps them to become multi-skilled personalities who can handle the challenges that industry and society will pose before them as future engineers. Committed, to deliver excellence in everything that it does, our institute works towards reducing the gap between industry and education.
- GEC-Gn endeavors to educate its students in a manner that offers them an opportunity not only to excel in academics but to be completely aware of their future industrial needs for professional expertise through innovative and flexible curriculum. This trains the students of this campus to reach their highest potential.
- The highly dedicated faculty members of GEC-Gn are experts in their professional fields. Their professional skills and industry linkages help the students by grooming them to become competent engineers who will contribute to the society and economy in the long run.



## About Computer Engineering Department

- Department of Computer Engineering is well posed to cater the needs of the course. It is equipped with well-developed laboratories to satisfy the course curriculum of various subjects related especially to the Computer field.
- The main backbone of the course is educating knowledge of computer and its engineering . Almost all fields are computerized to have ease of handling the problems of designing, manufacturing, maintenance, servicing, researching, marketing and accounting.
- The B.E. Computer engineering program includes computer operations on different languages, data generation , collection and utilization of information.
- The course imparts all the basics as well as latest knowledge pertaining to the rapidly developing field of computers. The course is designed to keep students in pace with the practical field.
- The mission of the department is to produce and impart theory, principles, practice and know-importance of computing in the information age.
- This is requires for the critical analysis, design, evolution and improvement of computing system in context of computers and industry services. It is our objective that students should be able to pursue advanced studies in computer engineering and information technology on a competitive universal basis.
- The college has well established computer labs which are facilitated with IBM, X series Xeon & dual processor Pentium servers, Compaq server and several hundred work stations connected in LAN & WAN.

# GOVERNMENT ENGINEERING COLLEGE, SECTOR-28, GANDHINAGAR

The Official Computer Engineering Department Newsletter



## Vision And Mission of Institute

### Vision

- To be a premier engineering institution, imparting quality education for innovative solutions relevant to society and environment.
- Important elements at the beginning. However, you don't have to do this for feature stories, where you're allowed to be more creative.

### Mission

- To develop human potential to its fullest extent so that intellectual and innovative engineers can emerge in a wide range of professions.
- To advance knowledge and educate students in engineering and other areas of scholarship that will best serve the nation and the world in future.
- To produce quality engineers, entrepreneurs and leaders to meet the present and future needs of society as well as environment.



Government Engineering  
College, ,Sector-28 GIDC,  
Sector-28, Gandhinagar,  
Gujarat 382028



079 2321 5167



<http://www.gecgh.cteguj.in/>



## Vision and Mission Of Department

### Vision

- To achieve excellence for providing value based education in Computer Engineering through innovation, team work and ethical practices.

### Mission

- To produce computer science and engineering graduates according to the needs of industry, government, society and scientific community.
- To develop partnership with industries, government agencies and R & D Organizations
- To motivate students/graduates to be entrepreneurs.
- To motivate students to participate in reputed conferences, workshops, symposiums, seminars and related technical activities.

**"Education is the most powerful weapon you can use to change the world."**

**- Nelson Mandela.**



## Program Educational Outcome (PEO)

- To provide students with a strong foundation in the mathematical, scientific and engineering fundamentals necessary to formulate, solve and analyze engineering problems and to prepare them for graduate studies, R&D, consultancy and higher learning.
- To develop an ability to analyze the requirements of the software, understand the technical specifications, design and provide novel engineering solutions and efficient product designs.
- To provide exposure to emerging cutting edge technologies, adequate training & opportunities to work as teams on multidisciplinary projects with effective communication skills and leadership qualities.
- To prepare the students for a successful career and work with values & social concern bridging the digital divide and meeting the requirements of Indian and multinational companies.
- To promote student awareness on the life-long learning and to introduce them to professional ethics and codes of professional practice

## Programme Specific Outcomes

- By the completion of Computer Engineering program the student will have following Program specific outcomes.
  - Design ,develop, test and evaluate computer based systems by applying standard software engineering practices and strategies in the area of algorithms, web design, data structure, and computer network
  - Apply knowledge of ethical principles required to work in a team as well as to lead a team

## Faculties of Computer Engineering Department



**Dr. S.P. Dave**

*Let's bring a holistic academic as well as practical approach for the students to become compatible and knowledgeable to the market needs.*



**Dr. D.A. Parikh**

*An optimised learning is to solve the problem without any damage or wastage of resources.*



**Prof. J.S. Dhobi**

*Without following the solution procedure, how can anyone transform the question into the answer?*



**Dr. Pinal J. Patel**

*There is only one way to get rid of darkness - Start the light. Naturally the darkness goes way.*



**Prof. Pratik Barot**

*Operating system is an administrative bridge between the software and hardware.*



**Prof N.K. Prajapati**

*Hardware is a body with its strengths and weaknesses. A better body can perform better.*

## Faculties of Computer Engineering Department



**Prof. N.S. Shroff**

*Making the machine to think and decide will help to improve the quality of human life.*



**Prof. D.P. Khem**

*To improve performance in less time theoretical understanding is must.*



**Prof. B.U. Ghadia**

*A Class is structural design of the Data-Type and procedure, while the Object is the memory occupied by the DATA Values.*



**Prof. Mihir Maheta**

*Teaching is a discovery. When you discover something from students, you don't need to prove anything.*



**Prof. Hemani Shah**

*It's time that becomes the Teachers who can teach/train the machines.*



**Prof. Ashvin Prajapati**

*A Class is structural design of the Data-Type and procedure, while the Object is the memory occupied by the DATA Values.*

## Faculties of Computer Engineering Department



**Prof. N.D. Shah**

*Always set a high milestone. Milestone will force you to come available/required in the market.*



**Prof. Nikhil Singh**

*It's time that becomes the Teachers who can teach/train the machines.*



**Prof. Hemani Shah**

*It's time that becomes the Teachers who can teach/train the machines.*



**Prof. Nitin Raval**

*To get employment, it is essential to learn the advanced skills points.*



**Prof. Yogendra Tank**

*Risk is everywhere if you notice. Once you have noticed there is no risk.*



**Mr. RAMIZ PARMAR**

*Ultimately success is up to you so believe in yourself first.*

## Infrastructure Details

### Programming Lab



- The laboratories are equipped with a number of desktop computers. The current software resources includes open source programming SDKs. The lab is used for the course subjects like C, C++ programming etc.

### PG Research Lab

- The ability of a computer or other machine to perform those activities that are normally thought to require intelligence. The branch of computer science concerned with the development of machines having this ability. Early AI projects, such as playing chess and solving mathematical problems, are now seen as trivial compared to visual pattern recognition, complex decision making, and the use of natural language.



## Infrastructure Details

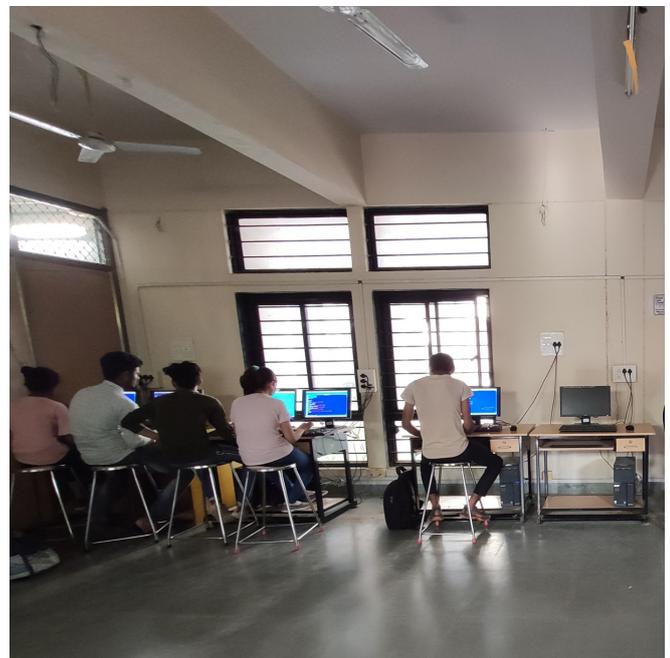
### Database Lab



- A database management system (DBMS) is computer application software that provides a way to manage data. The requirement of modern days is to have an automated system that manages, modifies and updates data accurately. This is achieved by a DBMS in robust, correct and non redundant way. DBMS lab aims at practicing and achieving this aim by using various software's such as SQL, ORACLE, and MS – Access etc

### Application Development Lab

- Website Development includes both designing (front end user interface) and code development (back end) including database management and dynamic functionality of website as per the user actions. Although we work with various tools/languages to achieve this functionality such as - ASP.NET, PHP, JSP but we primarily focus on .NET.



## Infrastructure Details

### Network Lab



- Networking is a key area in the field of computers that deals with the physical connectivity of computers which is monitored by a combination of special hardware and software. The course curriculum provides from the coverage of basics to advanced applications and services, while providing a platform for hands-on practical experience and soft-skills enhancement

### OOP LAB

- The laboratory is equipped with a number of desktop computers. The current software resources include a number of Object Oriented Programming SDKs, Integrated Development Environment like Eclipse, EditPlus etc. and Object Oriented Software Engineering tools



## Achievements:

### GDSC GECG

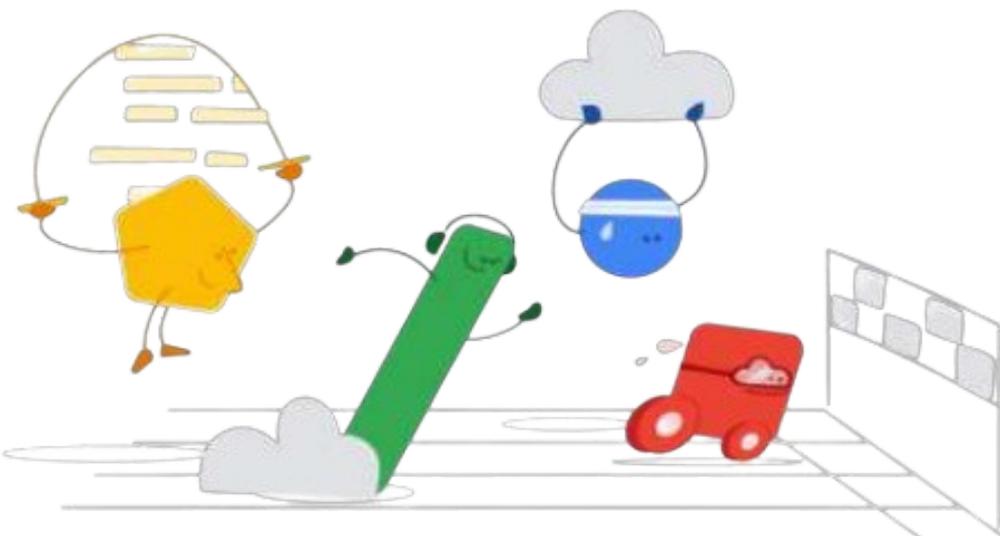


# Google Developer Student Clubs

Government Engineering College - Gandhinagar

## • BENEFITS TO JOIN

- Get access to exclusive Google Programs like 30 Days Of Google Cloud, Android Study Jams, etc.
- Participate in international/national level competitions.
- Grow Your Network Internationally.
- Learn and help others with the community.



@gdsc\_gecg



@GDSC GECG

## Achievements:

### GDSC GECG

- 30 Days of Google Cloud program will provide you an opportunity to kickstart your career in cloud and get hands-on practice on Google Cloud - the tool that powers apps like Google Search, Gmail and YouTube.
- Along the way, you will learn & practice concepts like computing, application development, big data & machine learning using cloud & if you get stuck, you will have your "Campus Facilitators" who are specially trained on Google Cloud to help.
- See the aggregate numbers below to get a quick view of how members of GDSC-GECG are doing and what's their progress.

Metric	Value
No. of students enrolled from GECG campus	130
No. of Skill Badge completions in Track 1	469
No. of Skill Badge completions in Track 2	442
No. of students eligible for Track 1 prizes	74
No. of students eligible for Track 2 prizes	69
No. of students completing atleast 1 track	75
No. of students completing both tracks	68

## Achievements:

### GDSC CLOUD CAMPAIGN

- **Program Syllabus**

#### Track 1: Cloud Engineering Track

1. Skill Badge: [Getting Started: Create and Manage Cloud Resources](#)
2. Skill Badge: [Perform Foundational Infrastructure Tasks in Google Cloud](#)
3. Skill Badge: [Setup and Configure a Cloud Environment in Google Cloud](#)
4. Skill Badge: [Deploy and Manage Cloud Environments with Google Cloud](#)
5. Skill Badge: [Build and Secure Networks in Google Cloud](#)
6. Skill Badge: [Deploy to Kubernetes in Google Cloud](#)

#### Track 2: Data Science & Machine Learning Track

1. Skill Badge: [Getting Started: Create and Manage Cloud Resources](#)
2. Skill Badge: [Perform Foundational Data, ML, and AI Tasks in Google Cloud](#)
3. Skill Badge: [Insights from Data with BigQuery](#)
4. Skill Badge: [Engineer Data in Google Cloud](#)
5. Skill Badge: [Integrate with Machine Learning APIs](#)
6. Skill Badge: [Explore Machine Learning Models with Explainable AI](#)

## Achievements:

### GDSC CLOUD CAMPAIGN

- **Rewards for Participation**

#### Option 1

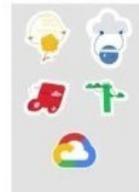
Complete **any one** -  
Track 1 OR Track 2



Appreciation Certificate from Google

#### Option 2

Complete **both the tracks**  
- Track 1 AND Track 2



Appreciation Certificate from Google

## Achievements:

### CodeChef GECG

- **BENEFITS TO JOIN**



- Enhance Your Competitive Programming Skills with a huge community and experts having a rating of 5★
- Get Mentorship from Campus Chapter Expert.
- Participate in different activities of a chapter like a coding contest, cookoff challenges etc. Become a part of CP community



 @codechef\_gecgn\_chapter

 @Codechef GECGN Chapter

## Achievements:

## Events

- **Pathway to the future[Android]**
- **Date: 31 October,2021**
- **Attendees: 30+**



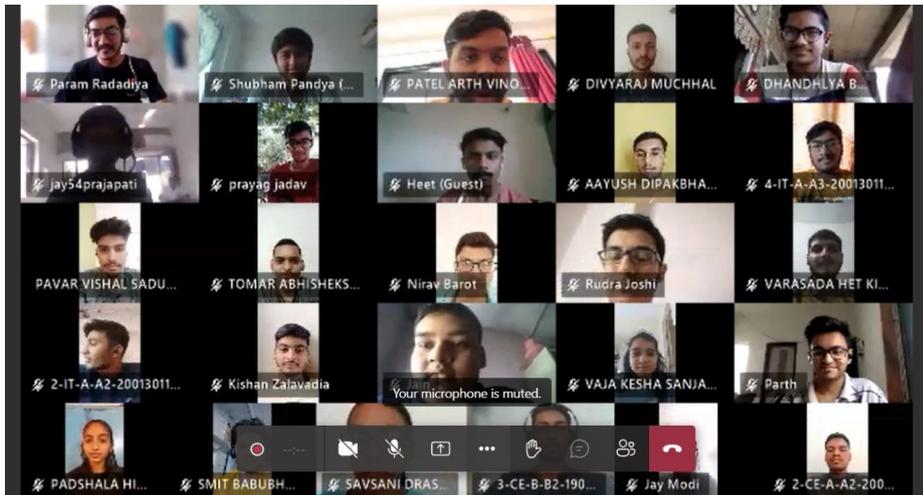
- **Pathway to the future[Web]**
- **Date: 30 October,2021**
- **Attendees: 40+**



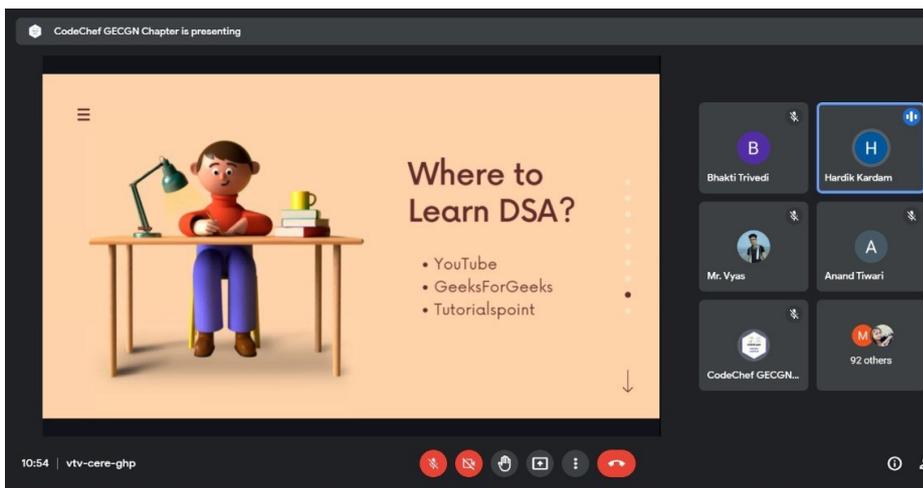
## Achievements:

### Events

- **GDSC-GECG Intro**
- **Session**
- **Date: 19 October,2021**
- **Attendees: 210+**



- **CodeChef ChapterIntro Session**
- **Date: 9 October,2021**
- **Attendees: 120+**



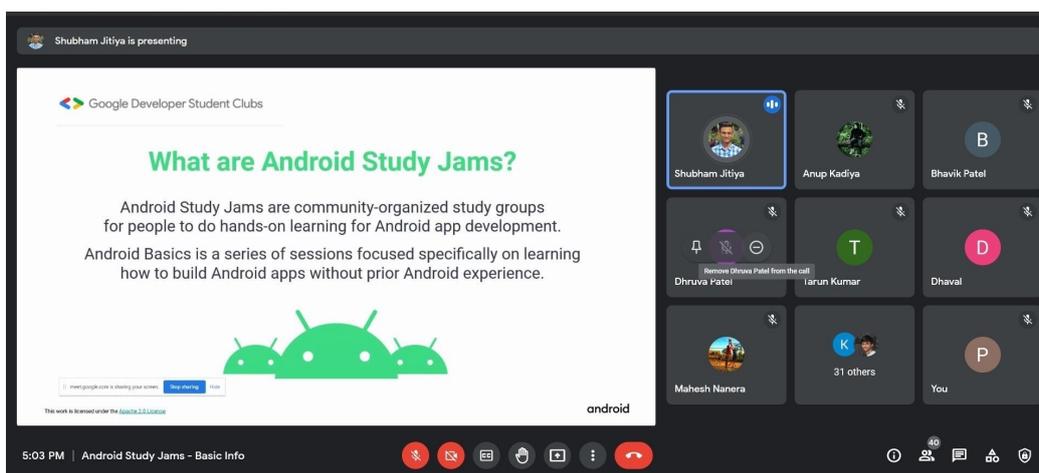
## Achievements:

## Events

- **Everything about Hactoberfest**
- **Date: 1 October,2021**
- **Attendees: 100+**



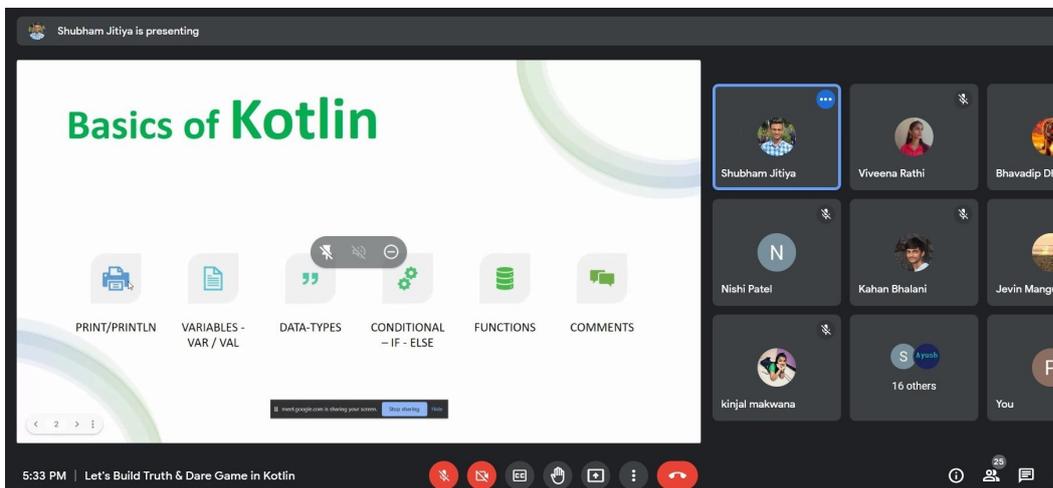
- **Android Study Jams [Info Sessio + Kotlin Basics]**
- **Date: 30 November,2021**
- **Attendees: 50+**



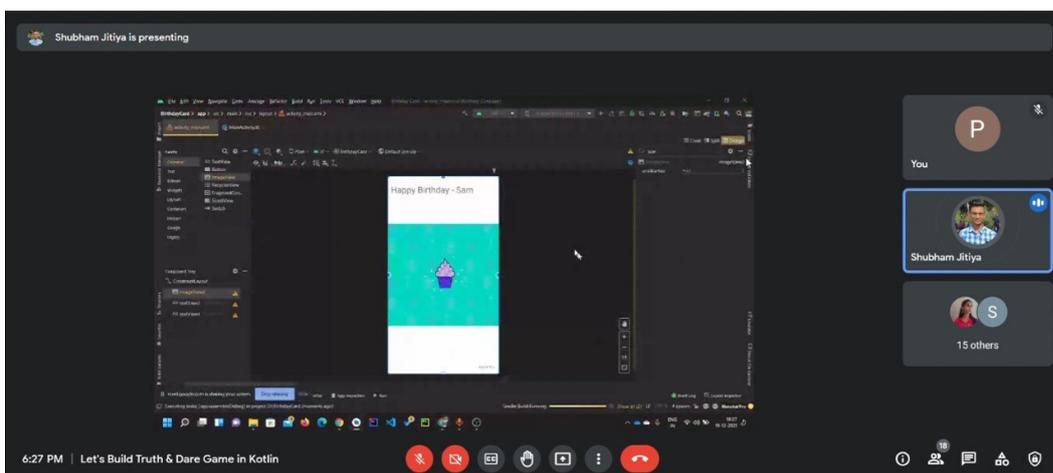
## Achievements:

## Events

- **Let's Build Truth & Dare Game in Kotlin**
- **Date: 19 December,2021**
- **Attendees: 40+**



- **Let's BuildLemonade App in Kotlin**
- **Date: 22 December,2021**
- **Attendees: 30+**



## Achievements:

## Blogs



- **MOTIVATION COMES FROM WITHIN**
- Many times people think that motivation comes from reading inspirational stories, Watching real-life inspired movies, hearing motivational speakers, etc. This may help you for a short period of time; like you have heard or watched something motivational, you feel inspired and when you are exhausted, you stop. But what I believe is that motivation comes from within.
- No one can inspire you more than your own self. It may sound weird but I have experienced this myself. Let me give you an example, if there is anything in your career or study that you are really proud of, think about it whenever you feel demotivated or whenever you doubt the worth of your existence. It may not be specifically a past achievement in the required field. It may be anything that you are extremely satisfied with, for which you have worked hard. I am sure that there is something like this in everybody's life. If you have accomplished that task in the past, then surely with the required efforts you can complete your present aspirations. You were the same individual a few years ago and from there till this present moment you have grown, you have attained much more maturity and knowledge.
- With the required efforts, you are going to definitely succeed. Even if you fail, you will get a sense of satisfaction that you worked hard, you tried your best and you will keep trying. A sense of belief that at least you are capable of trying which many people are fail to do. This hard work will be the inspiration for your future goals. This cycle will keep on-going with your determination

## Achievements:

## Blogs

- **INTERNET OF THINGS**



- As the word itself describes, the Internet of Things (IoT), is a technology that connects real-world objects or things to the Internet. These objects are controlled using a smartphone through the Internet. Various sensors are used for the detection of different factors.
- Sensors can sense the human presence, atmospheric pressure, soil state, human body status etc. Sensors are connected with a microcontroller centralized device that controls all the data sent sensors. Two famous microcontroller devices are Arduino and Raspberry Pi.
- Arduino is a microcontroller device that constantly works on a loop to gather data from the sensors attached to it. Raspberry PI is a very powerful microcomputer that has its own RaspberryPI Operating system which even supports code editors like VS Code and can be used as a mini-computer.
- Some applications of IoT are: In Smart Home System, to save electricity and alert user in case of Fire, Gas or Tap Leakage issues. In the Agriculture system, soil moisture sensors are used to detect whether crops are getting the proper source of nutrition.

- BY AYUSH SOLANKI ( IT SEM - 3 )

## Achievements:

### Blogs

- **Wake Up Note**

- We wake up to this evil world every morning and so we may appreciate ourselves and other people too. It takes lots of guts to survive in this world, I must say. Things are not as simple as they seem to be.
- To all those people who are living healthily, you all are amazing. If no one told you today how beautiful you are or how great job you are doing, let me just do that honour.

“You are the most beautiful person alive and can do anything that you want. Keep growing ”

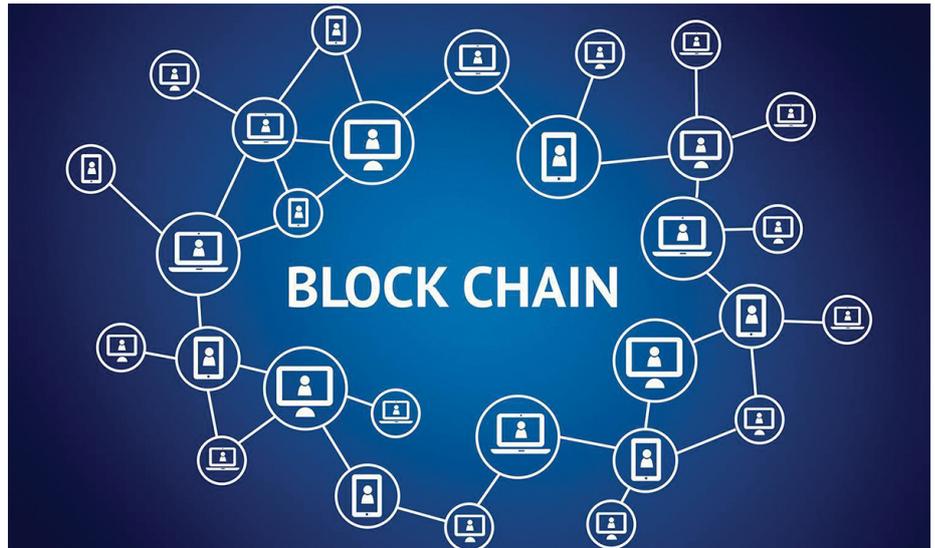
- It is so daring to see those cruel faces every day and yell at them inside our minds and control our feelings. It is so tough, isn't it?
- It is a task of bravery. And if no one has told these things to you lately, then wake up. I have told you these things today and you need to tell these to yourself every day from today onwards.

- BY VIVEENA RATHI ( CE SEM - 3 )

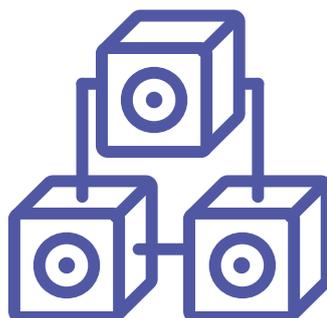
## Achievements:

## Blogs

- **BLOCKCHAIN**



- Blockchain is the core technology used to create the cryptocurrencies, like bitcoin. As part of the 4th industrial revolution since the invention of steam engine, electricity, and information technology, blockchain technology has been applied in many areas such as finance, judiciary, and commerce. The current paper focused on its potential educational applications and explored how blockchain technology can be used to solve some education problems.
- Blockchain technology is also known as distributed ledger technology. It allows participants to secure the settlement of transactions, achieve the transaction, and transfer of assets at a low-cost. A sample flow of cryptocurrency blockchain transactions can be seen as follows. User A initiates a transaction to User B via a peer-to-peer blockchain network. A cryptographic proof of identity (a pair of public key and private key) is used by the network to identify user A and user B uniquely. The transaction will then be broadcasted to the memory pool of the blockchain network waiting for transaction verification & validation. The new block is generated by obtaining a certain number of approved nodes; this is called reaching consensus.



## Achievements:

### Blogs

- **BLOCKCHAIN**

- After reaching consensus, a new “block” on the entire blockchain network is formed, and each node updates its respective copy of the blockchain ledger. This block contains all the transactions that occurred during this time. It is “linked” to the original block in the network through the digital signature. Each transaction in a block is tagged by a specific timestamp. The two blocks are also linked by a timestamp. Therefore, the data on the blockchain has a property of time, and the length of the chain is continuously growing. Blockchain uses specialized hardware to construct sizable cryptographic data chains, and SHA-256 hash function is used to prevent the tampering of data of third-party users. Any attempt to change even just a bit of information will break the existing chains. In short, blockchain is a decentralized and trustworthy digital public ledger.
- From the technical point of view, blockchain technology has four features:
  - Decentralization
  - Traceability
  - Immutability
  - Currency properties
- The realization of 21st century’s security, privacy, trust, and equality can be implemented by blockchain technology. Security refers to the protection of valuable properties and information. Nowadays some people have property but cannot prove ownership, such as intellectual property disputes. It may lead to conflict with others. Blockchain technology can be used by checking the records in the database to prove the properties.

## Achievements:

## Blogs

- **STAY STRONG**

- We all have had a phase where we feel lonely and left out! This is one of the toughest parts of life, but eventually, we all get through it. We grow stronger. We grow out bigger than the problems we are facing. Some do this in days while some can take a few years. But this is required. Trust me.
- How are you supposed to learn those life lessons? This phase might be hurting but it's just giving you the taste of what is already out there. I don't mean to scare you. The world is as good as you can think of but it can also be as bad. We all just need a positive attitude towards everything. This is required to know your actual potential, to know where you stand, to know what you are capable of doing; solely you. To know you, your skills and talents...Believe me!... This is God's way to tell you, "Spend time with yourself. This will not come any time soon. Some people don't realize this. Some may not even realize this! Some will just be sad for themselves for being lonely and some fall into the trap of depression. I can feel you! Been there and done that!
- But here I am, writing this for you. I just realized this today, and it took me a few years. So my message for you guys is,

## Achievements:

## Blogs

- **STAY STRONG**

"Stop being sad just because you don't have something you don't need. Instead, start living, invest the time in yourself! If you want to achieve heights then you should start right away! I had no one to tell me this and I was a fool not to understand this by myself.

You should not repeat this mistake of mine!"

- Well, think about this by spending a few minutes with yourself. I also want those people to reach out to other people and seek for guidance. Not to fall in some 2 day friendship which ends up hurting you even more. Read books! As they say, "Books are the bestest friends of humans."

- BY VIVEENA RATHI ( CE SEM - 3 )

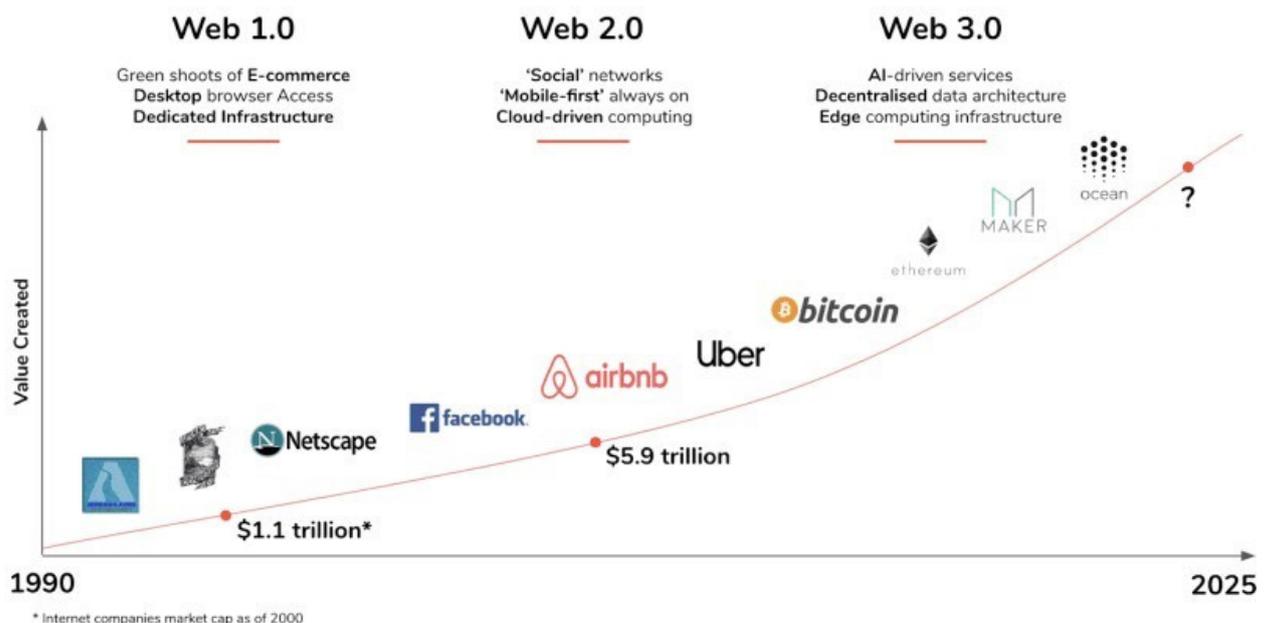
## Achievements:

## Blogs

### • HISTORY OF WEB

- We are constantly connected to devices. These devices communicate with each other to make our lives easier. We've become so immersed in technology that we don't even notice that a simple smartwatch app is replacing heavier equipment to keep our health vitals in check. Web 3.0 is the next step in the web's growth, and it aims to make the internet more intelligent. Over the last few years, the World Wide Web has developed, bringing with it new tools and strategies. Web 1.0, 2.0, and 3.0 are typical names for these stages. Now let's understand each of these.

## The Evolution of the Web



## Achievements:

### Blogs

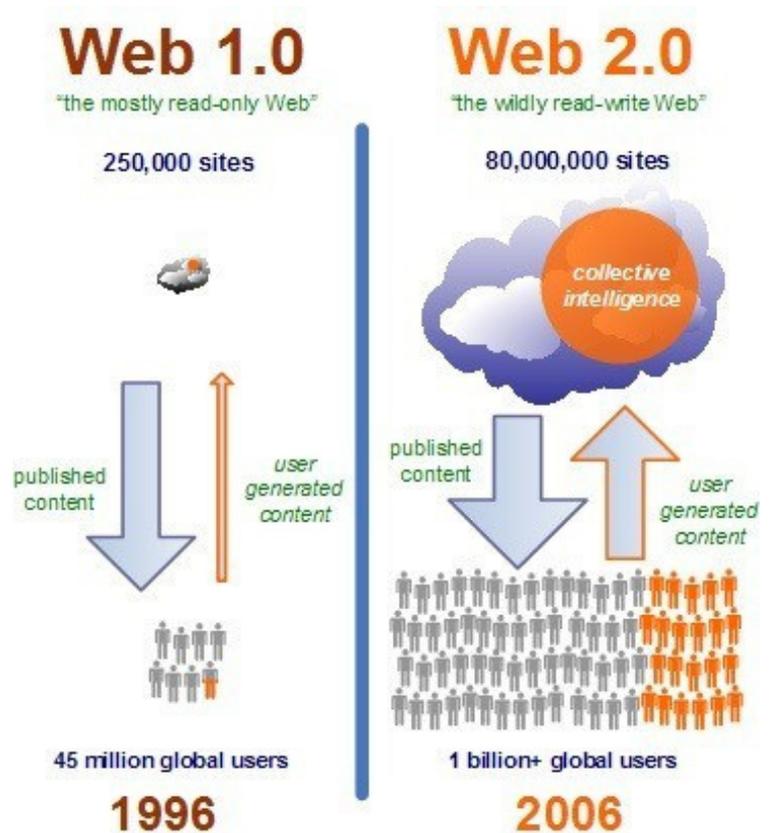
#### • HISTORY OF WEB

##### Web 1.0

- It is the first stage in the evolution of the web, which is also referred to as the read-only web. Web 1.0 websites were not as dynamic and interactive as it is now. The primary goal of the websites was to make the information available to the general public. As servers were improved, average connection speeds rose, and developers gained new skills and techniques, the shift from Web 1.0 to 2.0 occurred over time.

##### Web 2.0

- It is the second stage in the evolution of the web, which is also referred to as the read-write web. It's just a better version of the first world wide web, marked by the shift from static to dynamic or user-generated content, as well as the rise of socialmedia.



## Achievements:

### Blogs

#### • HISTORY OF WEB

##### Web 3.0

- It is the third stage in the evolution of the web, which is also referred to as the read-write-execute which refers to the future of the web. In this era, Artificial Intelligence and Machine Learning enable computers to understand data in the same way that people do.
- Web3 applications or DApps, are developed on decentralized peer-to-peer networks like Ethereum and IPFS. These networks are developed, operated, and maintained by their users, rather than by a business. They self-organize and don't have a single point of failure.



## Achievements:

## Blogs

- **HISTORY OF WEB**

### Web 3.0

- You'll notice that when you hear about Web3, cryptocurrencies are frequently mentioned. This is due to the fact that many of these protocols include cryptocurrencies. Anyone who wishes to help create, control, or improve one of the projects is given a cash incentive (tokens).
- These protocols frequently provide a wide range of services, including computation, storage, bandwidth, identification, hosting, and other online services previously supplied by cloud providers.

### What makes Web 3.0 so unique?

- Web 3's major benefit is that it seeks to solve the most serious issue that has arisen as a result of Web 2: the gathering of personal data by private networks, which is subsequently sold to marketers or potentially stolen by hackers.

## Achievements:

## Blogs

- **HISTORY OF WEB**



- These protocols frequently provide a wide range of services, including computation, storage, bandwidth, identification, hosting, and other online services previously supplied by cloud providers.

- BY BHAKTI TRIVEDI ( CE SEM - 5 )

## Achievements:

### Blogs

- **A COMMON MAN**

- Is life sumptuous for a common man? NEVER. A common man can never gain whatever he needs. I'm talking about the Indian system. As most of my viewers belong to US and UK they might not be aware of this. Well, in India, a hard-working man has no worth while the smart working men are halfway up and halfway down.
- What happens is that the men who try to be loyal to their work, to the society and to the family are not preferred over jobs while the ones who are involved in the black things (if you know what I mean) which include corruption, hoarding, trafficking, smuggling, etc. are often preferred for any kind of jobs. A common man is just the kind of person I described first. Hence, they are always left back in both development and growth. Still, they can manage their lives by doing some or the other work. But when it comes to family, it's really difficult to work in this world and earn to feed your family.

Difficulty makes them earn anyhow.

- Many manage to do this but others don't. Not only they suffer but with them, their family suffers. And if he is the only earning hand in the family then trust me that family is not able to satisfy their needs properly. This leads everyone to a halfway up, halfway down situation. They will have to try and try and try and they can't even give up because it's the only option for them. Sometimes even they get confused because they don't understand the difference between what they do and what should be done. Something goes wrong with their brains. Sometimes they get stressed too.

## Achievements:

### Blogs

- **A COMMON MAN**

- The family's condition is even more miserable. They don't get any rights over money. Whatever they are asked to do is to be done by them. Disappointment arrives in. After all, they are just what you are. Yes, humans. So they would definitely feel like the way you do. They get aggressive because there is no one to listen to them and because they don't speak up the, all the small things clot up together to create poison enough to kill oneself. They may be alive for the world, but inside their heart has already given up.

**What you give is what you receive.**

- In the end, it leaves you in a halfway up – halfway down situation.

**- BY VIVEENA RATHI ( CE SEM - 3)**

Achievements:

Blogs



## • FEATURE OF FUTURE

- In WhatsApp, users could send a voice message to another user, but they did not get a chance to listen to that voice message before sending it. However, this often led to the user sending the wrong voice message. With this in mind, WhatsApp has changed its feature and given a new feature to give you a chance to listen to it before sending a voice message. This feature will give the user a chance to check if it is appropriate to send them a recorded voice message. Not only that, after hearing it, if it is not suitable, you will get a chance to discard it and record it again.
- This feature announced by WhatsApp will work in both individual and group chat. As well as this feature will be available in both Android and iOS platforms.
- The feature was first seen in May. According to WABetaInfo, a beta version of WhatsApp, the feature initially features a review and cancel buttons. However, this feature has been and continues to be redesigned by the design of WhatsApp in view of the feedback received from users of the beta version. After which it was included in the update so that all users could use it.

## Achievements:

### Blogs

- **FEATURE OF FUTURE**

How will the voice message preview feature work?

- To use the voice message preview feature in WhatsApp on mobile, you have to hold down the microphone icon on the right side in WhatsApp chat. If you want to record in the handsfree mode, sliding the microphone's logo upwards will lock it. After which recording can be done. An interface will appear to the user during recording. In which you will find two options like stop and trash. The user will be able to stop recording by pressing the stop button. After which the play button will be displayed so that the user can hear it before sending it.



- Recorded voice message can be heard. If it is not correct, the voice message can be discarded using the trash button below it. Recording a voice message without sliding and locking the microphone button will not be heard again. If the user suspects an error in the recorded voice message, the user can discard the message by sliding it to the left.

## Achievements:

## Blogs

- **FEATURE OF FUTURE**



10 WhatsApp features that were launched in 2020

- WhatsApp flash call
- Missed group calls Disappearing mode WhatsApp Payment
- WhatsApp Advanced Search WhatsApp Dark Mode
- The limit for group voice or video calls has been increased Storage management tool
- Sticker making feature

- ARTICLE FROM SANDESH NEWS

## Achievements:

### One Step Ahead

#### LEARN PHRASES, NOT WORDS

- Fluency is being able to speak without hesitation. If you learn English words one at a time, it will be very hard not to hesitate when constructing sentences. That's because you'll have to translate every English sentence in your head from your native language, word by word. There is another way: learning new words as part of a common phrase can ease mental strain when speaking.
- To take a very basic example, if you are learning the word "tonight," it would help to try and learn the whole phrase "tonight, I am going to." This way, when you need to discuss your plans for the evening, your brain has half of the reply pre-prepared – there's less pausing and thinking involved.
- Learning lists of phrases in a new language is also known as "sentence mining".

#### ACCEPT THAT YOU WILL FEEL UNCOMFORTABLE SPEAKING ENGLISH

- For almost everyone, speaking any new language means fighting through a fear barrier. This is completely normal! Your native language is a very precise tool for describing concepts. You are completely aware of subtle implications your words carry, how to use irony and humor, and how word stress can slightly change the meaning of what you're saying.
- By comparison, speaking in any new language feels like using a blunt axe. You can't say exactly what you mean. You might offend someone, or make a fool of yourself. You certainly won't seem as smart as you really are. It's intimidating! Few language learners talk about how much it sucks.

## Achievements:

## One Step Ahead

### PLAN YOUR CONVERSATIONS WHEN YOU CAN

- This might seem like a silly tip for people who want to gain fluency. After all, fluency means being able to talk easily about anything you like! Well, that's true but if you aren't there yet, then a bit of planning might boost your confidence.
- If you are heading to an event where you know you can practice your English skills, try planning the small-talk you are going to make ahead of time. Are you going to talk about your college? Your coding group? Your hobbies?
- Whilst this may seem a bit silly, it can be helpful to have some conversation starters "ready to go" so that you can practice the vocabulary that you have been studying. This way, you won't feel under too much pressure to come up with something interesting to say in the moment.

### TALK TO YOURSELF

- It will look funny, but by talking to yourself in English in front of the mirror for each day, you'll learn to pronounce every letter in the English alphabet, plus when and how to use different expressions. You'll also learn where you make most of the mistakes.

## Achievements:

## One Step Ahead

### BE CONFIDENT

- Confidence underpins all effective communication. Other people will believe you will do as you say if you sound confident. Making eye contact, using a firm but friendly tone (never aggressive), are all ways you can exude confidence. Remember to always be listening to the other person and looking out for those nonverbal clues.

**"With confidence you have won before you have started!"**

### MISTAKES MEANS CORRECTING THEM

- Sometimes despite our best planning, due to external factors we make mistakes. In a way mistakes give us a feedback of how can we improve things we are doing. But we take mistakes as a message of discontinuing the whole thing halfway and starting something completely new.
- Don't beat yourself up if you make a mistake along the way. Consistency doesn't equal perfection, if in case you miss a day at the gym or indulge in eating a dessert encourage yourself to start again the very next day.

## Achievements:

## One Step Ahead

### STAY CONSISTENT

- Consistency is the key to success. Consistency leads to habits. Habits form the actions we take every day. Action leads to success.
- What this means for you is that you should set aside at least 2-3 hours a day on average of focused work. You can't multitask, so stop trying. Turn off Instagram, Facebook, Skype, mobile phone, tell your parents not to disturb you.
- And it will be hard, even harder when initial excitement and enthusiasm wear off. You will start to make excuses. One day might go by where you don't study at all, then another day, and another, until you finally quit. Don't let this happen to you. Don't be a quitter. That's not you. Make a plan and stick to it, and eventually you will get there. Maybe it will take a year, maybe even two, but consistent work will bring results.

### ALWAYS HAVE AN OPEN MIND

- Being an effective communicator requires that every conversation is approached with a flexible, open mind. This isn't always easy to achieve, but is very important to communicating effectively. Always engage in active listening, and be sure to demonstrate empathy by acknowledging you understand what the other person's point of view is. Adopting this approach will always ensure honest, productive communication.

## Achievements:

## Tech Updates

### OCTOBER

- Google makes it easier for Android developers to build apps with its Material You design.
- Facebook Changes its name to 'Meta' in Rebranding Exercise.
- Instagram finally lets everyone add links to their stories.
- Intel launches new 12th Gen Intel Core Processors and software updates for its dev ecosystem.
- China builds world's fastest programmable quantum computers.
- Babuk ransomware decryptor released to recover files for free.
- Apple now lets you review Messages, Phone, Photos, and Safari on the App Store.
- Tesla China announces R&D center.

## Achievements:

## Tech Updates

### NOVEMBER

- Parag Agrawal, a software engineer known to few outside Twitter, has replaced Jack Dorsey as CEO.
- Apple plans to replace the iPhone with AR in 10 years.
- Walmart launches drone-delivery system for customers in Arkansas.
- Samsung sells over a million units of The Frame TV in 2021.
- EU internet regulation to push Facebook to sanitize Metaverse platforms.
- Made-in-China Tesla Model Y Performance debuts with AMD Ryzen graphics chip.
- AT&T and Verizon agree to 5G power limits to resolve FAA safety concerns.
- Spotify becomes latest to experiment with a TikTok-style video feed.
- Twitter Launches New Live Shopping Feature.

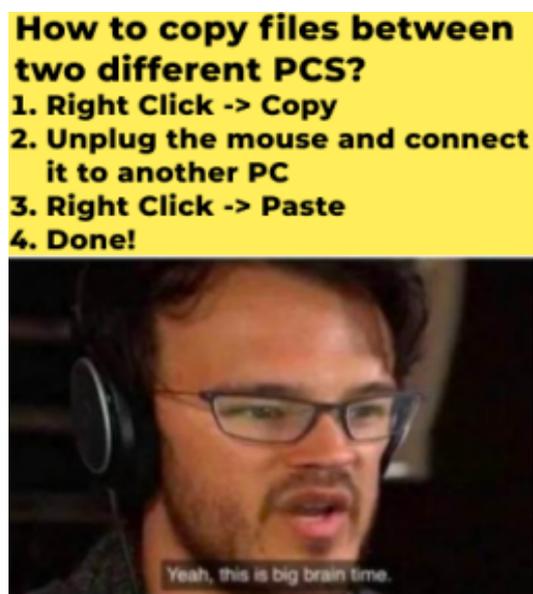
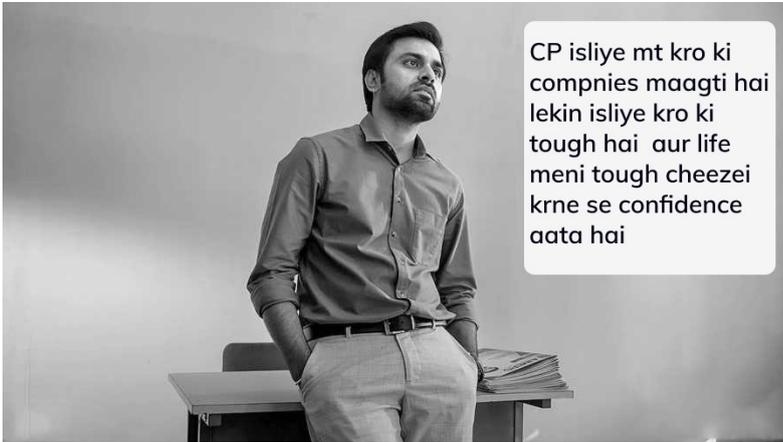
## Achievements:

## Tech Updates

### DECEMBER

- Windows 10 21H2 adds ransomware protection to the security baseline.
- WhatsApp's Businesses Nearby feature will allow users to search for local stores, groceries, restaurants, and more on the app.
- Apple Shares Three New Humorously Dramatic Ads Showing Off iPhone 13 Pro Camera Capabilities.
- NASA's \$10B James Webb Space Telescope Finally Takes Flight.
- Gibraltar poised to become first cryptocurrency hub.
- Apple reportedly hires away Meta's AR public relations head.
- LG's new recipe service uses Walmart and Amazon Fresh to deliver ingredients.
- FCC win clears the way for a massive Wi-Fi 6E upgrade.

# MEMES

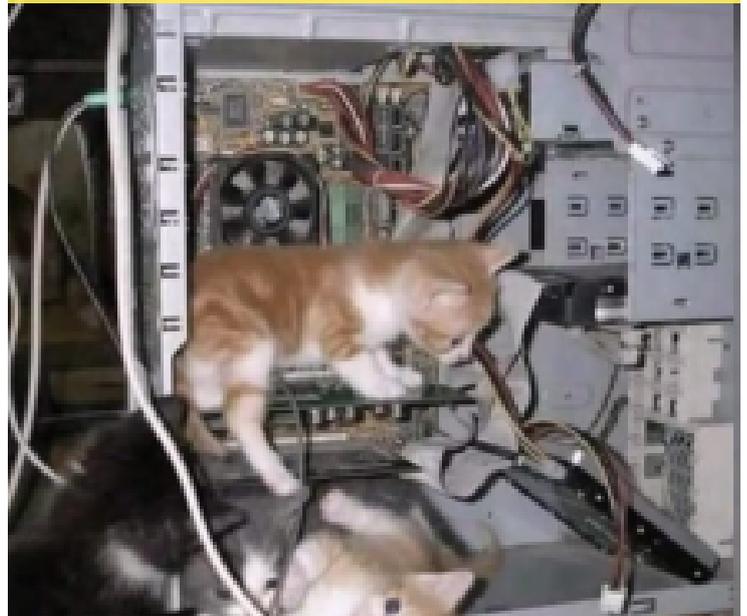


## MEMES

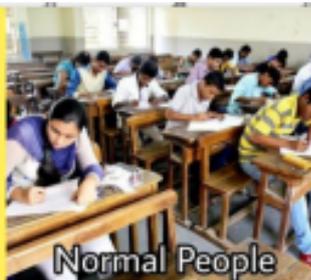
when you are programmer  
and see a hacking scene in a  
movie



Facebook interns trying to  
fix the servers



A Single  
piece of  
paper can't  
decide my  
future



A Single  
semicolon  
can't decide  
my future



When your code compiles  
after 253 failed attempts



**MEMES**

**C++ Developer learning python**



**Python Developer learning C++**



**Without CSS**



**With CSS**



**Me Coding On Normal Days**



**Me Coding In Hackathon**



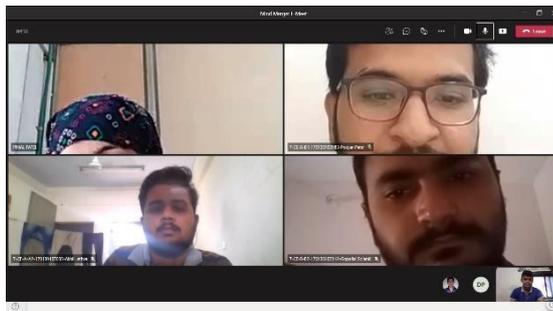
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- **MIND MERGER E- MEET by Dr. Pinal J. Patel ( Total 7 Talks by Experts)**

Day 3: Spectrum sensing techniques in cognitive radio



Day 4: VLSI : from introduction to application



Day 5: Recent trends in wireless network



Day 6: Hands on session: Microcontroller Interfacing

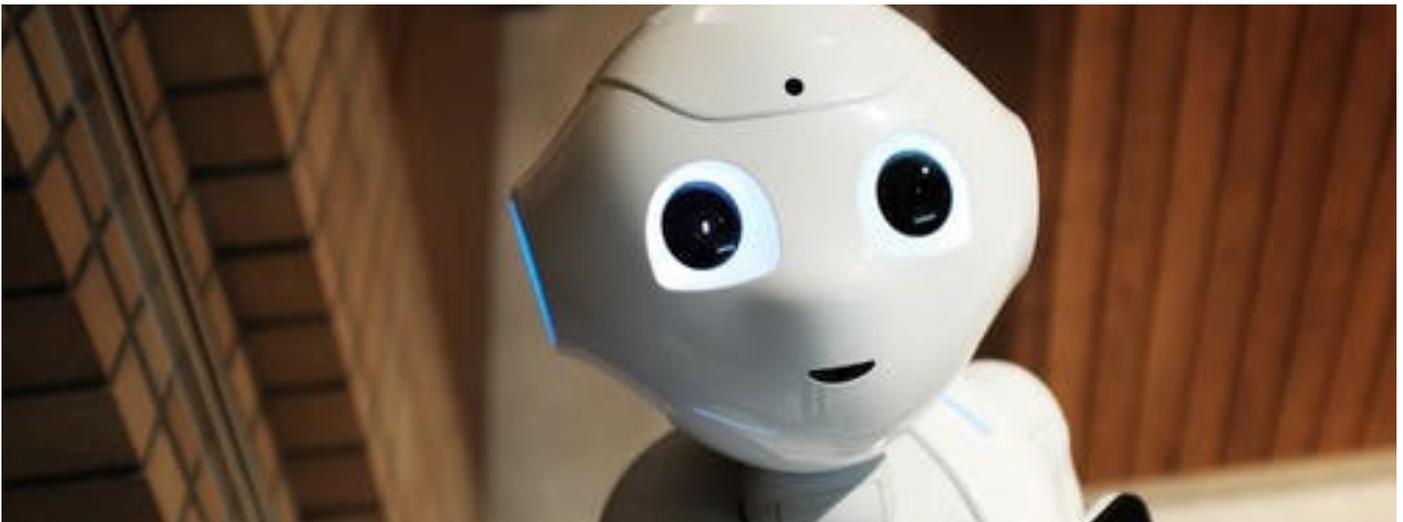


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## Student Activities

- **Mr. Keyur Unadkat, student of CE was selected in student exchange programme between GTU and IIT, Gandhinagar and will study his 6th semester at IIT, Gandhinagar.**
- **Mr. Sanidhya Suryakant Patel student of CE was among the top 11 finalists of “H-Social Creator 2020” organized by Hyundai Motors India Foundation**

## • Artificial Intelligence: All new digital future

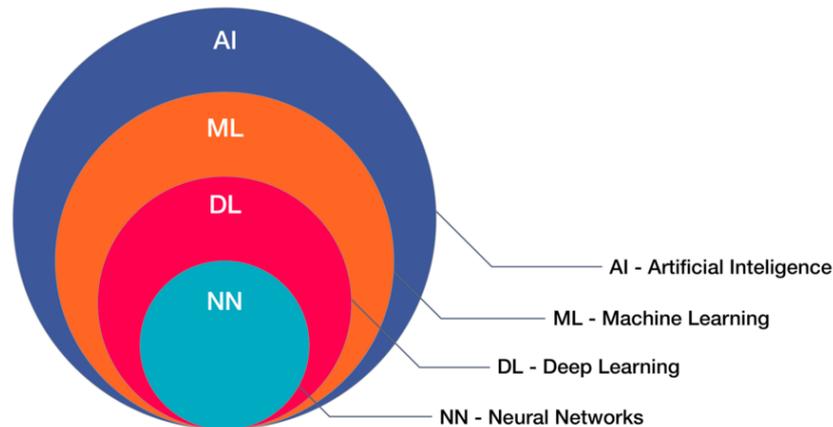


- **What is Artificial Intelligence?**
- Artificial intelligence is a branch of computer science that aims to create intelligent machines. It has become an essential part of the technology industry.
- Research associated with artificial intelligence is highly technical and specialized. The core problems of artificial intelligence include programming computers for certain traits
- Such as:
  - Knowledge
  - Reasoning
  - Problem solving
  - Perception
  - Learning
  - Planning
  - Ability to manipulate and move objects

## Student Activities

- **Artificial Intelligence: All new digital future**

- **Sub fields of AI**

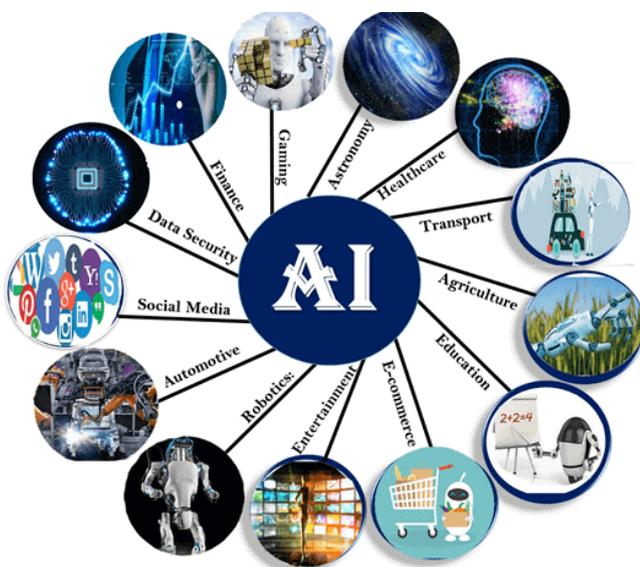


- Like humans, AI systems aren't born perfect. They have to learn and adapt, and all of that is done just like how humans learn and adapt: by taking in information, or data, processing it, and storing it for future reference. It's like when a young kid touches a hot stove. Their brain registers the pain and makes note to not do it again. AI isn't much different.
- Digging in deeper, AI itself is actually the largest and outermost circle in a series of four concentric circles. The next circle nested within AI is ML, or Machine Learning. ML is, unsurprisingly, the learning part of AI, but ML is itself reliant on the next circle within it, or Deep Learning (DL). But it doesn't stop there, the fourth and innermost circle, and the one that every other circle is counting on, is the idea of Neural Networks.
- Every part of AI is inspired by the human mind, but Neural Networks are the most clear and tangible application of that thinking. A functioning human brain is so impressive because it is made of lots of things that have simple jobs, but layers them together to make big things happen. The brain has billions of neurons that are linked together by trillions of synapses. The sheer scale of the operation makes it very difficult to replicate, but that's exactly what scientists, mathematicians, and experts are trying to do through Neural Networks.

## Student Activities

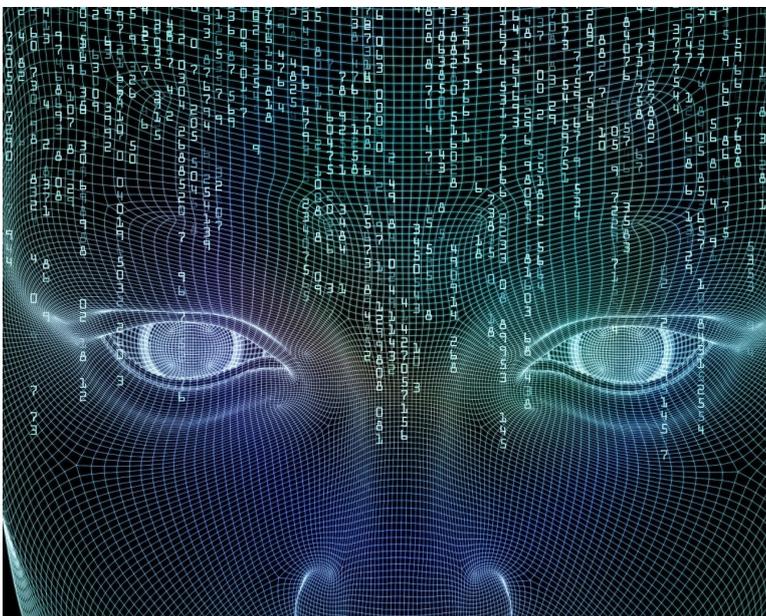
- **Artificial Intelligence: All new digital future**

- **Applications of AI**



- AI in healthcare
- AI in business
- AI in education
- AI in finance
- AI in law
- AI in manufacturing
- AI in banking
- AI in transportation
- Security

- **How can AI be dangerous?**



- Most researchers agree that a super-intelligent AI is unlikely to exhibit human emotions like love or hate, and that there is no reason to expect AI to become intentionally benevolent or malevolent. Instead, when considering how AI might become a risk, experts think two scenarios most likely:

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## Student Activities

- **Artificial Intelligence: All new digital future**
  - **1.The AI is programmed to do something devastating:** Autonomous weapons are artificial intelligence systems that are programmed to kill. In the hands of the wrong person, these weapons could easily cause mass casualties. Moreover, an AI arms race could inadvertently lead to an AI war that also results in mass casualties. To avoid being thwarted by the enemy, these weapons would be designed to be extremely difficult to simply “turn off,” so humans could plausibly lose control of such a situation. This risk is one that’s present even with narrow AI, but grows as levels of AI intelligence and autonomy increase.
  - **2.The AI is programmed to do something beneficial, but it develops a destructive method for achieving its goal:** This can happen whenever we fail to fully align the AI’s goals with ours, which is strikingly difficult. If you ask an obedient intelligent car to take you to the airport as fast as possible, it might get you there chased by helicopters and covered in vomit, doing not what you wanted but literally what you asked for. If a super-intelligent system is tasked with a ambitious geoengineering project, it might wreak havoc with our ecosystem as a side effect, and view human attempts to stop it as a threat to be met.
  - As these examples illustrate, the concern about advanced AI isn’t malevolence but competence. A super-intelligent AI will be extremely good at accomplishing its goals, and if those goals aren’t aligned with ours, we have a problem. You’re probably not an evil ant-hater who steps on ants out of malice, but if you’re in charge of a hydroelectric green energy project and there’s an anthill in the region to be flooded, too bad for the ants. A key goal of AI safety research is to never place humanity in the position of those ants.

- By Suryadipsinh Vaghela  
Computer Engineering

## Department Activities

- Webinar - Cyber Awareness Campaign on 5th October 2021, Coordinated by Dr. P.J.Patel



**LOGOUT**

WORLD'S BIGGEST CYBER AWARENESS CAMPAIGN

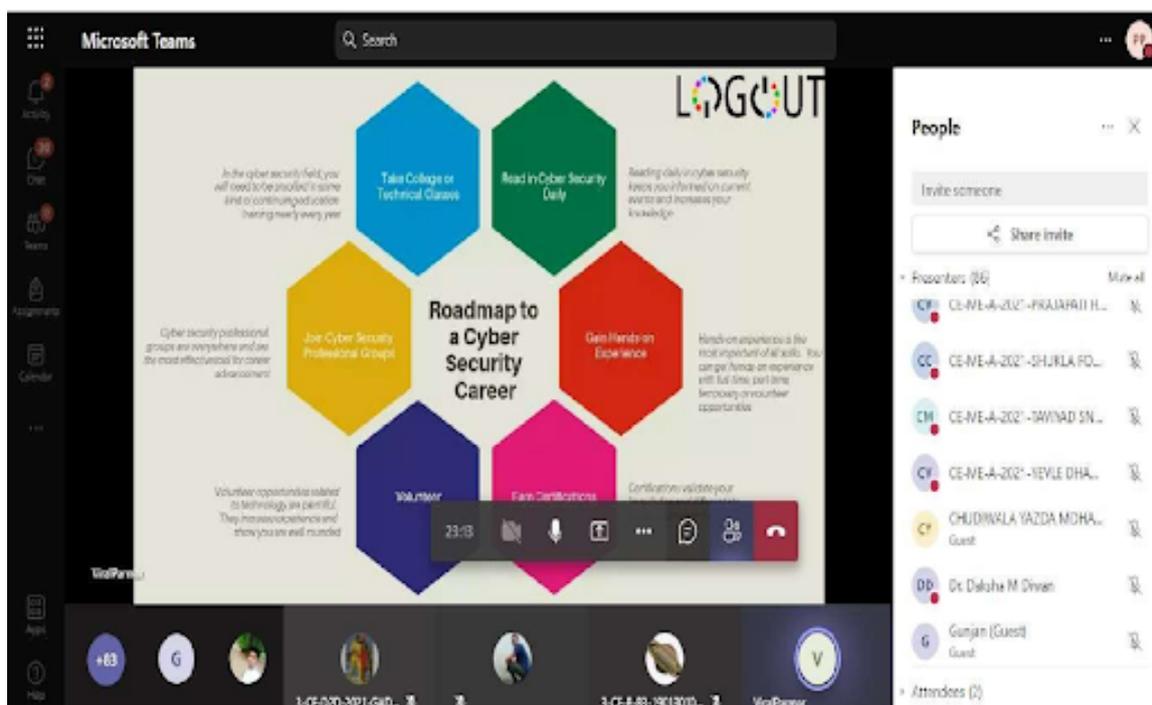
Date : 5th October 2021  
Time : 11 am onwards  
Organizer : GEC Gandhinagar

COMEXPO CYBER SECURITY FOUNDATION  
GOVERNMENT ENGINEERING COLLEGE GANDHINAGAR

**VIRAL PARMAR**  
Cyber Security Researcher

Register here -  
<https://forms.gle/4A7GKVXAp5oyfEds8>

Dr. Shweta Bawa, Principal  
Dr. D.A.Patil, HoD, CE  
Prof. J.S.Dholi  
Dr. Pinal Patel, Event Co-ordinator



Microsoft Teams

Search

**LOGOUT**

In the cyber security field, you will need to be proactive in learning and to continue your learning nearly every year.

Take College or Technical Classes

Read in Cyber Security Daily

Reading daily in cyber security helps you build on current knowledge and increase your knowledge.

Cyber security professional groups are everywhere and are the most effective way to receive advancement.

Join Cyber Security Professional Groups

Gain Hands-on Experience

Hands-on experience is the most important of all skills. You can gain hands-on experience with full time, part time, temporary or volunteer opportunities.

Volunteer opportunities related to technology are plentiful. They increase confidence and show you are well rounded.

Earn Certifications

Certifications validate your

**Roadmap to a Cyber Security Career**

23:13

People

Invite someone

Share invite

Presenters (06)

Attendees (02)

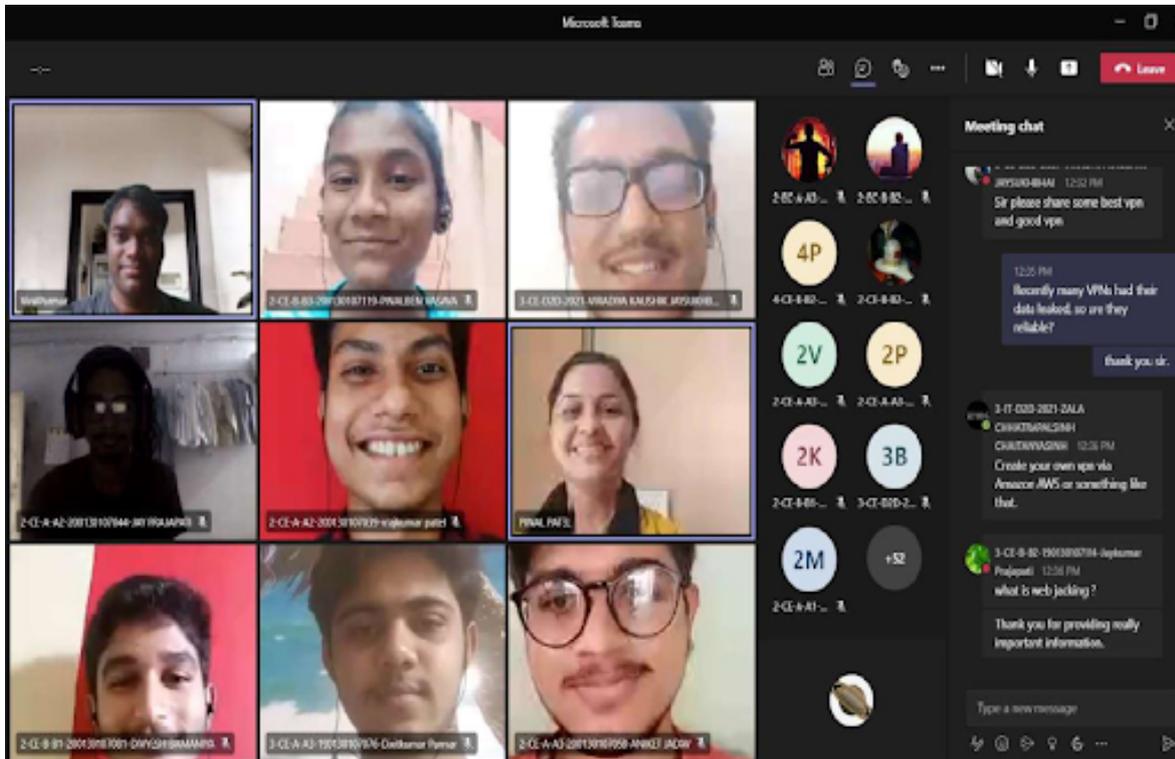
Dr. Daksha M Divan

Guest

Guest

## Department Activities

- Webinar - Cyber Awareness Campaign on 5th October 2021, Coordinated by Dr. P.J.Patel



**Total Number of registrations: 100**  
**Total number of attendees: 96**

## Department Activities

- Institute Website Launch – 7th October,2021 by Dr. Sweta dave ,  
Coordinated by Dr. P.J.Patel

**Government Engineering College, Gandhinagar**

# Website Launch Event

Link to Join: [https://tiny.cc/website\\_launch](https://tiny.cc/website_launch)

**7 Oct 2021 | 3:00 to 3:30 PM**

**Dr. Shweta Dave**  
Principal

**Dr. D.A. Parikh**  
HOD, CE

**Prof. J.S. Dhobi**

**Dr. Pinal Patel**  
Co-ordinator

**Total Number of registrations: 101**  
**Total number of attendees: 96**

## Department Activities

- Institute Website Launch – 7th October, 2021 by Dr. Sweta dave , Coordinated by Dr. P.J.Patel

## New Theme



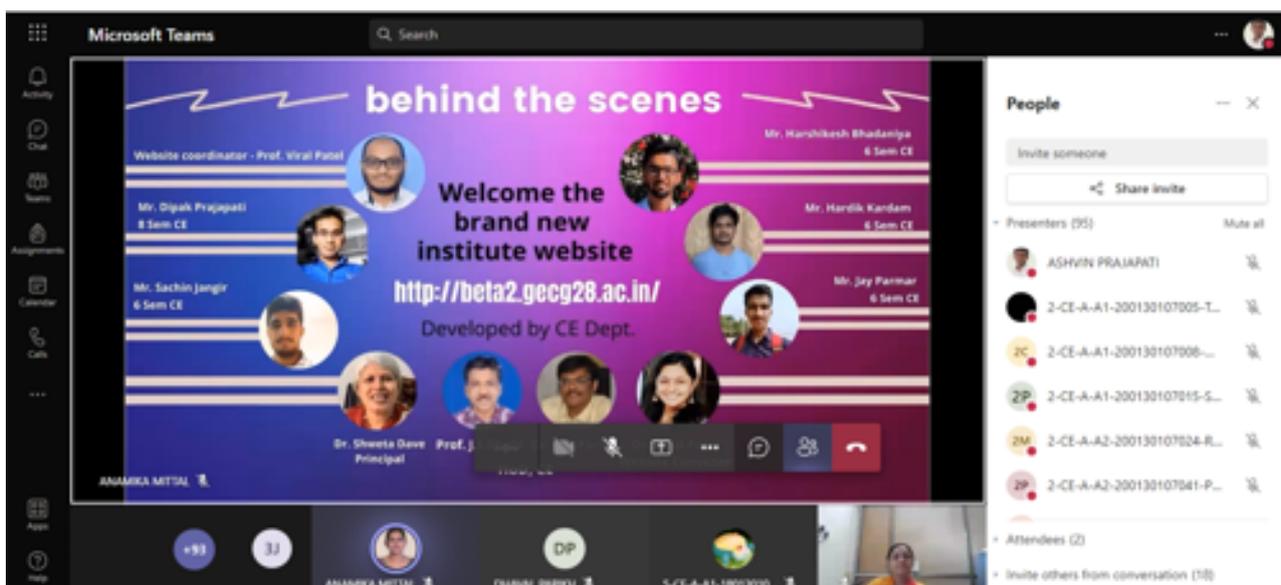
## New Cell Section



## Department Activities

- Institute Website Launch – 7th October,2021 by Dr. Sweta dave , Coordinated by Dr. P.J.Patel

## Better Department Pages



## Department Activities

- Institute Website Launch – 7th October,2021 by Dr. Sweta dave , Coordinated by Dr. P.J.Patel



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- Faculty participation in conference/work shop/seminars Or Expert Lecture delivered by faculty**

1. Prof. N.S. Shroff has participated in FDP on PhpMySQL organized by IIT Bombay Spoken Tutorial from 21st June, 2021 to 27th June,2021.
2. Prof. Ashvinkumar R. Prajapati has attended Online STTP on Induction Programme Phase-I organized by NITTR , Bhopal from 23rd August, 2021 to 03rd September ,2021.
3. Prof. N. D. Shah has attended Online STTP on Induction Programme Phase-II organized by NITTR , Bhopal from 22nd June, 2021 to 02nd July,2021.
4. Dr. P. J. Patel has participated in Online FDP on mobile and cloud security : challenges and directions from 03rd June, 2021 to 9th June,2021.

- Paper publication details ( Name of faculty, Conference, Journal, Date and other important details)**

1. Dr. Pinal J. Patel published paper on Automatic License Plate Detection & Recognition using Deep Learning in Design Engineering Journal, ISSN 0011-9342, Issue 8, 2021
2. Dr. Pinal J. Patel published paper on IoT Based Liquid Level Monitoring System Design Engineering Journal, ISSN 0011-9342, Issue 8, 2021
3. Dr. Pinal J. Patel published paper on Brain Tumor Detection and Segmentation, Design Engineering Journal, ISSN 0011-9342, Issue8, 2021

## Placements Activities

- CE/IT dept did Placement Process for Simplilearn, eDelta and Velox Core.
- CE/IT dept did Placement Process for Argusoft, ICT infracon, Xceltech and Plushive.
- Started Placement Process for Sterlite, Abyojanand, Neosoft, and Infostrech.
- Started Placement Process for Teksun, Congo and Envision Infotech Solutions.
- Started Placement Process for Maruti Techlabs.
- Started Placement Process for Argusoft and The One.
- Conducted meeting regarding placement."
- **Placements Awareness**



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# COMPUTER ENGINEERING DEPARTMENT

"Building The Future World"

**Head of Department**

**Coordinator**



**Dr. D.A. Parikh**  
HOD, CE Dept.



**Prof. J.S. Dhobi**  
Asso. Prof., CE Dept.

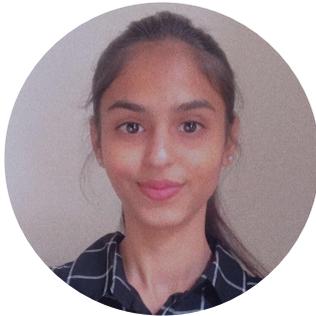


**Dr. Pinal J. Patel**

**Newsletter Editor**



**Kirtikumar Solanki**  
CE-SEM 7



**Viveena Rathi**  
CE-SEM 3