October, 2022

Monthly Insights

Department of Information Technology

Articles

FIVE WAYS YOU CAN MAKE THIS WORLD A BETTER PLACE

A blockchain is a type of distributed ledger technology that consists of growing list of records, called blocks, that are securely linked together using cryptography. Each block contains a cryptographic hash of the previous block, a timestamp, and transaction data (generally represented as a Merkle tree, where data nodes are represented by leaves). The timestamp proves that the transaction data existed when the block was created. Since each block contains information about the previous block, they effectively form a chain (compare linked list data structure), with each additional block linking to the ones before it. Consequently, blockchain transactions are irreversible in that, once they are recorded, the data in any given block cannot be altered retroactively without altering all subsequent blocks.

Blockchains are typically managed by a peer-to-peer (P2P) computer network for use as a public distributed ledger, where nodes collectively adhere to a consensus algorithm protocol to add and validate new transaction blocks. Although blockchain records are not unalterable, since blockchain forks are possible, blockchains may be considered secure by design and exemplify a distributed computing system with high Byzantine fault tolerance.

Operations often waste effort on duplicate record keeping and third-party validations. Record-keeping systems can be vulnerable to fraud and cyberattacks. Limited transparency can slow data verification. And with the arrival of IoT, transaction volumes have exploded. All of this slows business, drains the bottom line — and means we need a better way. Enter blockchain.

Suppose you are transferring money to your family or friends from your bank account. You would log in to online banking and transfer the amount to the other person using their account number. When the transaction is done, your bank updates the transaction records. It seems simple enough, right? There is a potential issue which most of us neglect. These types of transactions can be tampered with very quickly. People who are familiar with this truth are often wary of using these types of transactions, hence the evolution of third-party payment applications in recent years. But this vulnerability is essentially why Blockchain technology was created.

- Soham Desai, TE-IT

Academics

The results of FE for Sem II Regular session AY 2021- 22 were announced.

The following are the toppers of FE-IT: **Rakshita Sarap** ranking first with 9.60 CGPA, **Harshit Jain** ranking second with 9.55 CGPA, and **Sumit Vishwakarma** ranked third with 9.45 CGPA.

Activities

The Technical team of the Student Council, Team Transmission, organized their first ever event for the year, a quiz competition for the SE and TE students called 'Game of Tech'. **Sarvesh Chavan**, **Krishna Sabat**, and **Tanvi Bhaba**l from TE-IT in the second place winning a cash prize of Rs. 2000; and **Ishan Vaghela** from SE-IT in the third place winning a cash prize of Rs. 1000.

The sports team of the Student Council, under the guidance of Prof. Jaychand Upadhyay, organized "Indoor Sparx"

Arm-wrestling (Boys): Winner- 1st Runner up- **Pratham Singh** (SE-IT), 2 nd Runnder up- **Tejas Nicha** (BE-IT)

Arm-wrestling (Girls): Winner- **Anusha Dhaundiyal** (TE-IT), 1st Runner up- **Anisha Prabhu** (TE-IT)

Table Tennis (Doubles): 2 nd Rank- **Krishna Sabat** and **Sarvesh Chavan** (TE-IT), 3 rd rank- **Pratham Singh** and **Vivek Singh** (SE-IT)

Fitness Challenge (Girls): 2 nd Rank- **Anusha Dhaundiyal** (TE-IT), 3 rd rank- **Avani Kadam** (TE-IT)

The Student Council of XIE, under the guidance of Dean of Staff & Students Welfare, Prof. Kavita Jain, organized a 'Garba Night'. It was held on 4th October 2022. The prize for the best-dressed students was won by **Ishan Vaghela** from SE-IT. The title of the 'Best Dancers' went to **Soham Desai** and **Anusha Dhaundiyal** from TE-IT.

The Department of Computer Engineering of Xavier Institute of Engineering organized an inter-college project competition named 'InnoTech' in association with The Institution of Engineering and Technology on October 15, 2022. The runners up of the competition were **Arjun Singh Shishodia**, **Mrunal Vaidya**, and **Gaurav Vengurlekar** from TE-IT for their project, 'Only QnA Forums'.
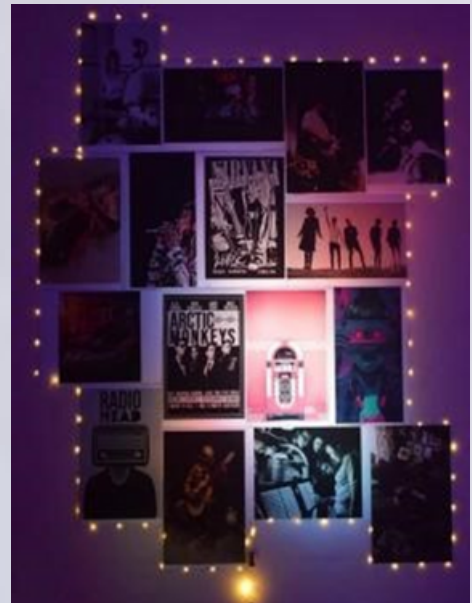
Prof. Jyotsna More from the IT department organized an expert lecture on '**NoSQL queries**' for DBMS subject and SQL lab for the second year students of the IT department on 11th October 2022. The expert lecture was delivered by **Prof. Kavita Jain** from the Computer department.

Some XIE students participated in 'Arthonomics' organized by Jai Hind College, Mumbai. **Aditi Satam** (SE-IT), won first place in 'Economics Unearthed';

Student Council arranged an "Open Mic" Event for Students.

Our Amazing Crew

Xavier Institute of Engineering

**XAVIER INSTITUTE OF ENGINEERING
DEPARTMENT OF INFORMATION TECHNOLOGY**

IT DEPARTMENT MAGAZINE COMMITTEE

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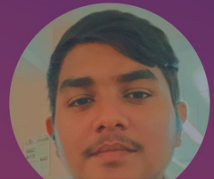Sulochana Devi

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