Computer Engineering Department Newsletter-"Spectrum"

Jan 2024 to June 2024 (Ed.II)

Theme of Current Issue "Block chain Technology".

Inside

Message From Principal.....

It gives me immense pleasure to publish the Second issue of Department Newsletter for the year 2023-24. As we stepped into the New Year, may it bring joy, success & new opportunities to our professional & personal lives. I extend my warm wishes to each one of you.

In today's competitive world, staying at the forefront of technological advancements is crucial. This year, in the first issue of 2024, our newsletter explores the theme of 'Blockchain Technology' — revolutionary force reshaping industries across the Globe. Much like the intricate interconnected blocks of blockchain, our education endeavors are interconnected and contribute to the larger narratives of knowledge & progress.

Blockchain, with its decentralised and secure nature, reflects the principle we hold dear at JSP. It's a symbol of transparency, collaboration, & innovation — values that echo in our academic pursuits. As we delve into this theme, let's draw inspiration from the blockchain's ability to create a robust, interconnected network and apply it to our collective journey of learning & growth.

Prof.Dr.S.M.Deokar,
(Principal)

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Prof. S.M.Deokar

Ph.D. (E &TC)

Principal

Computer Engineering Department

VISION

To build creative programming mind in the students for adopting emerging technology in the field of computing, for the betterment of society.

MISSION

M1: To impart sound theoretical and practical knowledge in the disciplines of computing, through effective teaching learning process.

M2: To produce industry and society oriented skillful engineers through co-curricular and extra-curricular activities.

M3.To inculcate ethical values in the students.

Vice Principal's Message……..

Dear Readers,

First of all, I would like to convey my best wishes for 'New Year 2024' to all the readers. Since, the theme of the current issue of our Newsletter is Blockchain Technology; I would like to give you glimpses of the real-world application of this technology. In recent years, Blockchain Technology has been leveraged by various Governments across the globe for land registration, healthcare, e-voting, and e-identities. Here Maharashtra has stood out among its fellow states, when it comes to the active adoption of Blockchain Technology. This technology is adopted to increase the efficiency in the operations and streamlining the processes. Recent applications of this technology, such as digital governance, have reduced frauds while simultaneously increasing trust and accountability in the life of common citizens.

In 2023, Maharashtra's Transport Department announced that transfers of Regional Transport Office (RTO) Inspectors will be done with the help of a "Blockchain-based" computerised system. By embracing digital methods and leveraging Blockchain's intrinsic security features, it aims to reinstate integrity to the transfer system thus providing equal opportunities for all eligible inspectors. In 2022, Government of Maharashtra started using Blockchain Technology based system for caste certificate validation which currently involves a lot of manual intervention and is prone to frauds and forgery, thus depriving eligible candidates' jobs or education opportunities. Under this initiative, 65,000 Blockchain Caste Certificates were issued in Etapalli village and Gadchiroli. In 2022, the office of Inspector General of Registration and Stamps has started to store property buyer's eregistration data and its authentication using Blockchain Technology which can be shared with relevant stakeholders including property buyers, Government authorities and financial institutions involved in funding the purchases. In the same year, Public Health and Family Welfare Department of Maharashtra announced that it has teamed-up with Algorand Blockchain and MAPay, for storing personal health data of patients using NFT (Non-Fungible Token) technology thereby eliminating intermediaries in the healthcare system. It will be releasing 100 million NFTs in the first phase of this initiative.

Mr.M.S.Kalbande
(Vice-Principal)

Faculty Speak…….

A blockchain is peer-to-peer distributed ledger technology which is an immutable decentralized encrypted distributed ledger technology. A blockchain is a distributed database or ledger that is shared among the nodes of a computer network . As a database blockchain stores information electronically in digital format . Blockchain are best known for their crucial role in cryptocurrency systems ,such as bitcoin for maintaing a secure and decentralized record of transaction .The innovation with a blockchain is that it guarantees the fidelity and security of a record of data and generates trust without the need for a trusted third party

What is a cryptocurrency?

A cryptocurrency is a form of digital currency that can be used to verify transfer of assets to control the addition of new units and to secure financial transactions using cryptocurrency.

Cryptocurrency, sometimes called cryptocurrency or crypto is any form of currency that is exists, digitally or virtually and uses cryptography to secure transaction .crypto currencies don't have a central issuing or decentralized system to record transaction and issue new units.

Cryptocurrency
Digital / virtual currency
Secured by cryptography
Not tampered
Electronic peer-to-peer currency
They don't have physical existence

Ms.V.A.Pawar

(Lecturer)

A Blockchain is a decentralized database that is shared among computer network nodes. Transactional data from numerous sources may be readily collected, integrated, and shared using blockchain cloud services. Data is divided into common blocks linked together using cryptographic hashes as unique IDs. Data integrity is ensured via Blockchain, which uses a single source of truth to eliminate data duplication and increase security. Fraud and data tampering is prevented in a blockchain system since data can't be changed without the permission of the nodes of the parties.

Blockchain technology is an advanced database mechanism that allows transparent information sharing within a business network. A blockchain database stores data in blocks that are linked together in a chain. The data is chronologically consistent because you cannot delete or modify the chain without consensus from the network. As a result, you can use blockchain technology to create an unalterable or immutable ledger for tracking orders, payments, accounts, and other transactions. The system has built-in mechanisms that prevent unauthorized transaction entries and create consistency in the shared view of these transactions.

Traditional database technologies present several challenges for recording financial transactions. For instance, consider the sale of a property. Once the money is exchanged, ownership of the property is transferred to the buyer.

Mrs.S.A.Kaulage
(Lecturer)

Student Speak……..

Hey there! Ever wonder how our digital world keeps things honest and secure? That's where block chain swoops in like a superhero. Let's break it down!

What's Block chain?

Think of it like a super-secure digital notebook. But here's the cool part – it's not owned by one person. Instead, lots of computers team up to keep it safe.

How Does it Work?

When you do something online, like buying a game, that action gets put into a "block." Then, it's linked to the stuff people did before. This creates a chain of blocks – a block chain! And because everyone has a copy of this chain, it's nearly impossible to mess with.

Why is it Awesome?

Two big reasons: transparency and security. Everyone can see what's in the digital notebook, making things super clear. Plus, it's like a high-tech fortress – really hard for bad guys to sneak in and change things.

Beyond Money: What Else Can it Do?

Sure, block chain rocked the world with Bitcoin, but it's not a one-hit wonder. It's like a multitasking champion. Businesses are using it to keep track of products, doctors are using it for medical records, and it can even handle agreements without needing a middleman. We call these super-smart agreements "smart contracts."

Any Hurdles?

Yep, every hero has its challenges. For block chain, it's things like getting even better at handling lots of actions at once and figuring out the rules (the legal stuff). But tech whizzes are on the case, working to make it even more awesome.

Final Thoughts: A Digital Revolution

So, in a nutshell, block chain is like the superhero of our online world – making things clear, keeping them safe, and opening the door to a future where trust rules the digital realm. Exciting times ahead!

Pratik Bhosale
(FYCO)

Blockchain technology is a distributed ledger system that operates on a decentralized network of computers, recording transactions. Every transaction is kept in a "block," which is connected to all other transactions chronologically. Through the use of consensus processes and cryptographic techniques, it guarantees immutability, security, and transparency and permits trustless transactions without the need for middlemen. This technology was first used in cryptocurrencies such as Bitcoin, but it has now spread to other industries, allowing supply chain management, smart contracts, transparent and secure record-keeping, and more.

The uses of blockchain technology are numerous and significant. It is utilized in finance for quick, safe transactions as well as international payments. It is essential to the transparent administration of patient data in healthcare. Blockchain is used by supply chains to verify authenticity and provide traceability. By automating contracts, smart contracts lessen the need for middlemen in the real estate and other industries. Innovative financial services are provided by decentralized finance platforms. Blockchain's potential for safe elections being investigated by voting systems. Its tamper-proof characteristic is advantageous for copyright protection and digital identity verification. These uses highlight how blockchain can be used to improve efficiency, security, and transparency in a variety of industries.

To sum up, blockchain technology is a revolutionary force that is changing industries all over the world. Its decentralized, transparent, and secure architecture provides answers to long-standing issues in a variety of fields, including supply chain management, healthcare, and finance.

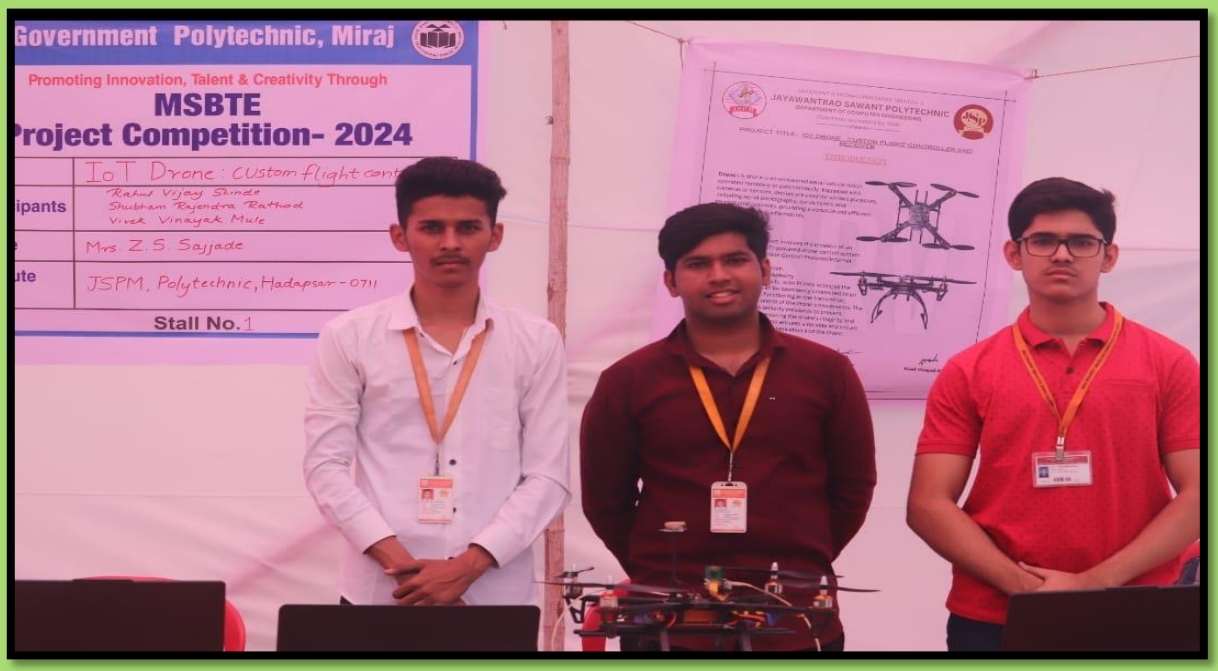
Mitesh Patel

(FYCO)

DEPARTMENTAL NEWS.....

Students Achievements

Department of Computer Engineering TYCO Students Minto Sing, Satyam Kumar and Abhijeet selected in the DIPEX competition at Navi Mumbai for the project titled "Custom made transmitter and receiver implement on RC plane"



Department of Computer Engineering TYCO Students Shubham Rathod, Rahul Shinde and Vivek Mule selected in the MSBTE PROJECT competition at Miraj for the project titled "IOT drone"

Students Achievements

Department of Computer Engineering TYCO Students Tabish Raza and Shruti Gaikwad got first Rank in the Diploma level Project Competition " Project Expo" -2K24 at MIT,Pune for the project Dual Purpose Network security tool.

Department of Computer Engineering TYCO Students Alisha Munawar Inamdar and Ishwari Suresh Shendkar got third Rank in the Diploma level Project Competition " Project Expo" -2K24 at MIT,Pune for the project “Character recognition on forged entities”

Students Achievements

Department of Computer Engineering TYCO Students Mitesh Ulhas Mokashi ,Yash Ramrao Kolate and Amin Aslam Mistary achieved 3rd prize worth 5000/- cash in national level event project competition for the project titled "Recycle waste classifier" held at Anant Rao Pawar College of engineering and research',Pune.This project is guided by Prof.P.S.Waikar.

Department of Computer Engineering TYCO Students Aniket Yelamali,Vaibhav Mehtre, Atharv Sonar and Akshay Adam achieved 1st prize worth 10000/- cash in national level event project competition for the project titled "Earthquake predictor and alert provider" held at Anant Rao Pawar College of engineering and research'.

Students Achievements

Department of Computer Engineering TYCO Students Yash Mhaske,Viraj Turkane and Atharv Khawade achieved 3rd prize worth 5000/- cash in national level event project competition for the project titled " Virtual Classroom" held at Anant Rao Pawar College of engineering and research'.

Department of Computer Engineering student Kadam Rohan got 1st Prize at IEDSSA in Zonal chess and carom competition held at Jawaharlal Nehru Institute of Technology,Dhankawadi,Pune.

Project Exhibition

Jaywantrao Sawant polytechnic's Computer Engineering Department organized "Project Exhibition "of third year students with the capstone projects, the participating students demonstrated their programing skills in various programming languages, platforms, operating systems, and mobile app development.Mr.Narke Mahadeo Maruti,Mr.Prakash Krishna Shinde and Mr.Akshaykumar Kapre from Dr.D.Y.Patil Polytechnic ,Kolhapur were the judges for this exhibition.

Personality Development

Jaywantrao Sawant polytechnic's Computer Engineering Department organized seminar on "Personality Development" for the first year students.Prof. Sonali B Mharsale from Nashik was the chief guest for this seminar. She explained that Personality Development is like a journey where we learn about ourselves and how we act. It's about getting better and changing in different ways.Prof.S.N.Thorat and Prof.T.N.Kathale coordinated this program.

Social Activity

Department of Computer Engineering decided to work for the heritage fort in the Satara city and help in conservation of the historical places. The first year Computer Engineering Students organized the "Sajjangad Fort", Satara Cleanup Drive. Total 76 students of Computer Engineering Department participated in this drive and cleaned the fort. The plastic bags, glass bottles, used dishes were disposed. Mrs.S.N.Thorat, Ms.T.N.Kathale ,Mr.S.P.Wadkar, Mrs.K.M.Shirole ,Ms.V.A.Rajgiri and Mrs.A.R.Mohite coordinated the visit successfully.

Parents Meet

Jaywantrao Sawant polytechnic's Computer Engineering Department organized "Parents Meet" for first, second and third year student's parents. The main purpose of this meet is to create a common platform, where teacher and parents come together to enrich the student's educational experiences and discuss variety of issues, regarding all round development of students.

Women's Day Celebration

Department of Computer Engineering organized women's day celebration. Ms.Sayali Dhanabai, (Entrepreneur) was the chief guest for this program. She said that Women's empowerment may be defined in several ways, including accepting women's viewpoints, making an effort to seek them and raising the status of women through education, Awareness, literacy, and training.Prof S.N.Thorat coordinated this program successfully.

Farewell Function

Department of Computer Engineering organized farewell function for the third year students. Students shared their thoughts on this day. Different awards like Best student, Best Anchor and Best Social Element were given to the students.

Days Celebration

JSPM's Jaywantrao Sawant Polytechnic organized Traditional Day and Bollywood Day for the students. Students came in different Bollywood characters attire and Traditional outfits on those days.

HOD
(Mr.M.S.Kalbande)