



CODING CLUB CITK NEWSLETTER

VOL .1 EDITION 1

NOVEMBER,2022



MESSAGE



Welcome to first issue of the quarterly newsletter published by Coding Club CITK. Warm welcome to all volunteers, activists, and readers! A newsletter is like a mirror that displays the clear picture of all the activities carried out by the publisher. I hope this newsletter will help students in strengthen their knowledge. I extend my congratulations to the members of Coding club CITK who contributed so greatly to finishing the job of publishing this newsletter quickly.

~Dr. Amitava Nag



I am pleased that the Coding club CITK has taken the initiative to release the newsletter highlighting various activities, events, and achievements of the club. An informative newsletter plays a vital role in providing greater insight into the achievements accomplished by the club on a regular interval. The coding club has been active since its creation in 2021 and is organizing boot camps, workshops, coding competitions, expert talks, etc., to ensure programming and IT skills exposure to our students. I am happy that all the clubs of the Institute are now very active and organizing various technical activities. The efforts put forth by the coding club will help in shaping our students' careers and the growth and success of the department and the Institute as a whole. I would like to thank the coding club team for their sincere efforts in bringing such a beautiful and appealing newsletter.

~Dr. Pranav Kumar Singh



I am very glad that the first edition of the newsletter is publishing for the Coding club, Dept. of CSE, CIT Kokrajhar in 2022-23. Through this newsletter, students would like to highlight the activities, accomplishments and their achievement on different level of platforms based on the coding skills. I am hoping the best for this coding club in the coming future activities.

~Dr. Pankaj Pratap Singh

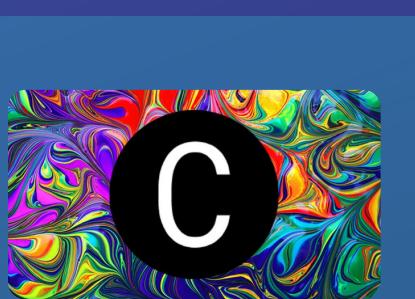
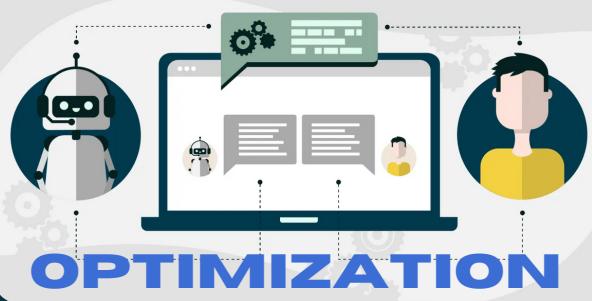
"The first programming language for a computer was Plankalkül, developed by Konrad Zuse for the Z3 between 1943 and 1945."

"The Firefox logo isn't a fox; it's actually a red panda."



Cloud computing is the act of using an interconnected network of Internet-hosted remote servers to manage, store and process data.

The first computer mouse wasn't made from plastic. It was made out of wood. It was rectangular and featured a little button on the top right.



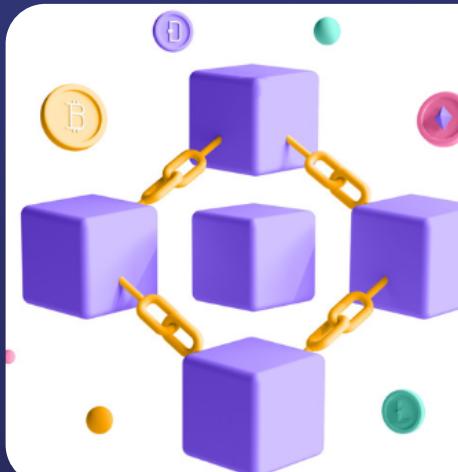
Carbon is an experimental, general-purpose programming language and an open-source project which was started by Google, following in the footsteps of previous Google-made programming languages (Go and Dart). This language was introduced as a C++ successor to fix several perceived shortcomings of C++.

The idea of selecting the best way to accomplish a task that involves fixed requirements is as old as civilization. Optimization can be defined as the art of obtaining best policies to satisfy certain objectives, at the same time satisfying fixed requirements. Recent advances in the field of applied mathematics, operational research, and digital computer technology enable many of the complicated engineering problems to be optimized successfully and thereby optimization technique has attained the status of a science rather than an art.

WEB 3.0

Web 3.0 is the upcoming third generation of the internet where websites and apps will be able to process information in a smart human-like way through technologies like machine learning (ML), Big Data, decentralized ledger technology (DLT), etc. Web 3.0 was originally called the Semantic Web by World Wide Web inventor Tim Berners-Lee, and was aimed at being a more autonomous, intelligent, and open internet.

The Web 3.0 definition can be expanded as follows: data will be interconnected in a decentralized way, which would be a huge leap forward to our current generation of the internet (Web 2.0), where data is mostly stored in centralized repositories. Furthermore, users and machines will be able to interact with data. But for this to happen, programs need to understand information both conceptually and contextually. With this in mind, the two cornerstones of Web 3.0 are semantic web and artificial intelligence (AI).



Dark WEB

Many internet users only use the surface web, data that can be accessed by a typical web browser. The dark web, also known as darknet websites, are accessible only through networks such as Tor ("The Onion Routing" project) that are created specifically for the dark web. Tor browser and Tor-accessible sites are widely used among the darknet users and can be identified by the domain ".onion". Identities and locations of darknet users stay anonymous and cannot be tracked due to the layered encryption system. Due to the high level of encryption, websites are not able to track geolocation and IP of their users, and users are not able to get this information about the host.

13 NEW ANDROID 13

Android 13 OS :
Major updates-

1. Limited access to photos –
Users can select which files you want to give permission to access to an app.
2. Clipboard update – All the apps cannot access what you have copied to clipboard.
3. Spatial Audio – Now we can enjoy the al new 360° Audio through Android 13.
4. Language Change – We can choose different languages for different apps.

Natural language processing (NLP) is the ability of computers to understand human speech as it is spoken. NLP is a branch of artificial intelligence that has many important implications on the ways that computers and humans interact. Machine Learning has helped computers parse the ambiguity of human language.

Apache OpenNLP, Natural Language Toolkit(NLTK), Stanford NLP are various open source NLP libraries used in real world applications.



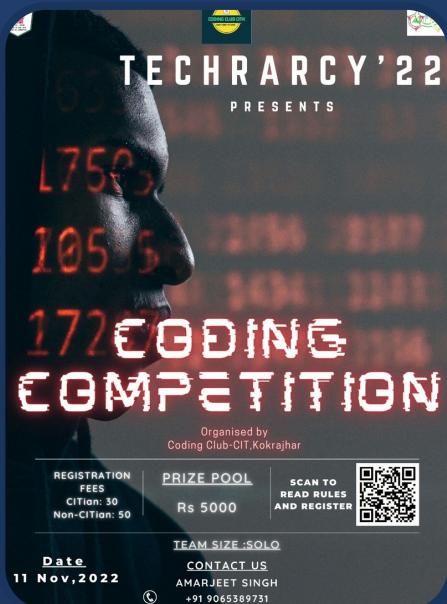
DIRECT-TO-MOBILE BROADCAST

India's public broadcaster Prasar Bharati, in collaboration with the Indian Institute of Technology (IIT)-Kanpur, has come up with a proof of concept where more than 200 channels can be watched on mobile phones without any data, using direct-to-mobile broadcast.

This change will happen within next three to four years. In 2021, to spur Aatmanirbhar Bharat in Media and Broadcasting a MoU was signed between Prasar Bharati and IIT Kanpur to develop next generation broadcast solution



PAST EVENTS



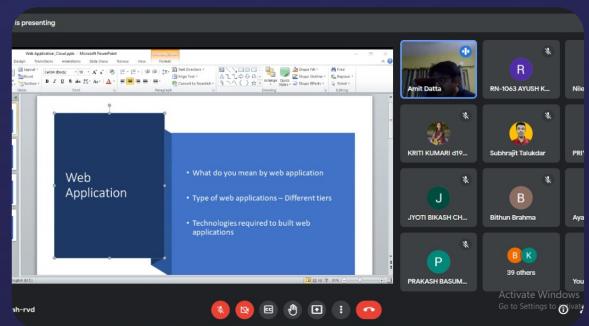
Speaker of the edition



Sohan Basak is currently SDE in Amazon. Previously, he had worked as SDE in Ederlabs and Signzy. He mentored the 2 days workshop on python and developed the snake game using this very popular programming language. He also guided students in career related queries. Students were very excited and learned a lot from the workshop . We again thanks sir for giving his precious time for the workshop.



Dr. Amit Dutta is currently senior architect in Cognizant. He has specialization in Web based application using Java and Public Cloud like AWS, GCP. He gives a deep insight into web development and basic of cloud computing during the webinar. The session was very fruitful and full of warm participation. We again thanks sir for giving his precious time for the webinar.



FUTURE EVENTS

SEMINAR
ORGANISED BY CODING CLUB CITK



TOPIC:
STARTING YOUR STARTUP

WORKSHOP
ON
C++ STL
STANDARD TEMPLATE LIBRARY
असतो मा सद्गम
तमसो मा ज्योतिर्गमय



www.codingclubcitk.ac.in

LIVE WEBINAR
ORGANISED BY CODING CLUB CITK IN ASSOCIATION WITH GEEKSFORGEEKS



ON DATA STRUCTURE AND ALGORITHM



CAREER PORTALS

1. **Capgemini** : <https://lnkd.in/dZBUYY88>
2. **Infosys** : <https://lnkd.in/dEcdZ7gf>
3. **Wipro** : <https://lnkd.in/d89txDcp>
4. **Cognizant** : https://lnkd.in/d6tp6F_p
5. **LTI** : <https://lnkd.in/dnCVuQzD>
6. **TCS** : <https://lnkd.in/dJpHXdvv>
7. **DXC Technology** : <https://lnkd.in/dnVzT7eb>
8. **HCL** : <https://lnkd.in/dwTuQWAf>
9. **Hashedin** : <https://lnkd.in/d2ePnTG4>
10. **Hexaware** : <https://jobs.hexaware.com/>

For more Company's Career Portals visit:-
<http://shorturl.at/owENU>



PUZZLE SECTION



There are 10 stacks of 10 coins each, where each coin weighs 10 gms. However, one of the stacks is defective I, and that stack contains coins which weigh 9 gms. Determine the minimum number of weighs needed to identify the deceptive stack.



10 coins are placed before you on a table, while you stay blindfolded. The candidate is permitted to touch the coins, however conditions to the puzzle dictates that he can't really determine which way up they are by feel. 5 coins are placed heads up, while the other 5 are kept tails up, without the interviewee knowing which ones which are. If you are allowed to flip the coins any number of times, how would you build two piles of coins each with the same number of heads up.



There are 3 mislabeled jars, with apple and oranges in the first and second jar respectively. The third jar contains a mixture of apples and oranges. You can pick as many fruits as required to precisely label each jar. Determine the minimum number of fruits to be picked up in the process of labeling the jars.

For more puzzle visit:-<http://shorturl.at/LM025>