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Gujarati Linguistic Minority Institution

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ITS



YES

An Initiative By



Department of Information Technology

#SATYAVACHAN



There is always something good hidden in each day, try to capture that.

Staff Coordinators:

- Mrs. Sanketi Raut
- Mr. Akshay Agrawal

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Cyber Security

Cyber security can be described as the collective methods, technologies, and processes to help protect the confidentiality, integrity, and availability of computer systems, networks and data, against cyber-attacks or unauthorized access.

The main purpose of cyber security is to protect all organizational assets from both external and internal threats as well as disruptions caused due to natural disasters.

As organizational assets are made up of multiple disparate systems, an effective and efficient cyber security posture requires coordinated efforts across all its information systems.

Therefore, cyber security is made up of the following sub-domains:

Application Security:

Application security involves implementing various defenses within all software and services used within an organization against a wide range of threats. It requires designing secure application architectures, writing secure code, implementing strong data input validation, threat modeling, etc. to minimize the likelihood of any unauthorized access or modification of application resources.

Identity Management and Data Security:

Identity management includes frameworks, processes, and activities that enables authentication and authorization of legitimate individuals to information systems within an organization. Data security involves implementing strong information storage mechanisms that ensure security of data at rest and in transit.

Network Security:

Network security involves implementing both hardware and software mechanisms to protect the network and infrastructure from unauthorized access, disruptions, and misuse. Effective network security helps protect organizational assets against multiple external and internal threats.

Mobile Security:

Mobile security refers to protecting both organizational and personal information stored on mobile devices like cell phones, laptops, tablets, etc. from various threats such as unauthorized access, device loss or theft, malware, etc.

Cloud Security:

Cloud security relates to designing secure cloud architectures and applications for organization using various cloud service providers such as AWS, Google, Azure, Rackspace, etc. Effective architecture and environment configuration ensures protection against various threats.

Disaster recovery and business continuity planning (DR&BC):

DR&BC deals with processes, monitoring, alerts and plans that help organizations prepare for keeping business critical systems online during and after any kind of a disaster as well as resuming lost operations and systems after an incident.

User education:

Formally training individuals regarding topics on computer security is essential in raising awareness about industry best practices, organizational procedures and policies as well as monitoring and reporting malicious activities.

The importance and challenges of cyber security:

Given the rapidly evolving technological landscape and the fact that adoption of software is ever increasing across various sectors including finance, government, military, retail, hospitals, education, energy to name a few, more and more information is becoming digital and accessible through wireless and wired digital communication networks and across the omnipresent internet.

All this highly sensitive information is of a great value to criminals and evil doers which is why it is important to protect it using a strong cyber security measures and processes.

The importance of good cyber security strategies is evident in the recent high-profile security breaches of organizations such as Equifax, Yahoo, and the U.S. Securities and Exchange Commission (SEC), who lost extremely sensitive user information that caused irreparable damage to both their finances and reputation. And as the trend suggests, the rate of cyber-attacks show no sign of slowing down. Companies, both large and small, are targeted everyday by attackers to obtain sensitive information or cause disruption of services.

The same evolving technological landscape also poses challenges in implementing effective cyber security strategies. Software constantly changes when its updated and modified which introduces new issues and vulnerabilities and opens it up for various cyber-attacks. Furthermore, IT infrastructure evolves as well with many of the companies already migrating their on-premise systems to the cloud which introduces a whole new set of design and implementation issues resulting in a new category of vulnerabilities. Companies are unaware of the various risks within their IT infrastructure and hence fail to have any cyber security countermeasures in place until it's far too late.

Source: <https://www.synopsys.com/glossary/what-is-cyber-security.html>

Ms. Mudra Doshi,

Assistant Professor

10 Most-asked job interview questions for B.Tech freshers

Getting a chance to get an interview in a top tech giant like Accenture, Tata Consultancy Services, Infosys, etc. is not easy. However, if you have got the chance to get into the tech giant then make sure that you leave no stone unturned to get the job of your dreams. Here is a list of job interview questions that hiring managers ask at TCS, Infosys, Accenture, Cognizant, and other top companies:

1. "Tell us a bit about yourself."

Start by giving a brief about your educational background. You can elaborate on the projects/assignments you're worked on in college or your achievements during your academic tenure. Keep the answer short. You don't need to add your hobbies, strengths & weaknesses in this answer.

2. "What are your key strengths & weaknesses?"

Although this seems like a tough question to answer, it actually is not. You can answer this by saying that you are an optimistic person, or you enjoy learning new things. For weaknesses, you have to say something which in general a weak point of a person, but is alright from an organization perspective. For instance, "I am a perfectionist and end up spending too much time on details," or "I don't know how to say 'No' and end up helping everyone rather than focusing on my work."

3. "Where do you see yourself in 5 years from now?"

You need to show that you are dedicated to your career growth. You can answer this by saying, "I want to use my leadership skills and manage a team at a senior position."

4. "Have you been in some challenging situation? Explain how you handled it?"

The question is about your problem solving skills. You need to have an answer that showcases either your creativity, or quick thinking, or even time management skills.

5. "Why do you think you are fit for this role?"

For this question, you must be thorough with the Job details and the responsibilities mentioned in the job description. You have to weave your answer around what skills are needed for the job.

6. "What are your hobbies and interests?"

You can't say, 'I don't have any.' A simple 'music', 'painting', or 'si-fi shows' would suffice.

7. "Are you willing to change your role and profile when required for project?"

As a fresher, you have to be aware that they will expect you to be flexible. The correct answer is "Yes"!

8. "Are you flexible with timings (if have to work in shift)?"

If you feel you are not open to changing work timings, have a solid reason to back it up, for Instance higher education or up skilling courses you are planning on.

9. "Why do you want to join our company?"

You have to answer this by narrating how you see yourself growing in this company. You can also say that you love the visison that the company has for the future of IT industry. But be careful, don't say it if you don't know anything about company's policies for the future.

10. "How much salary do you expect?"

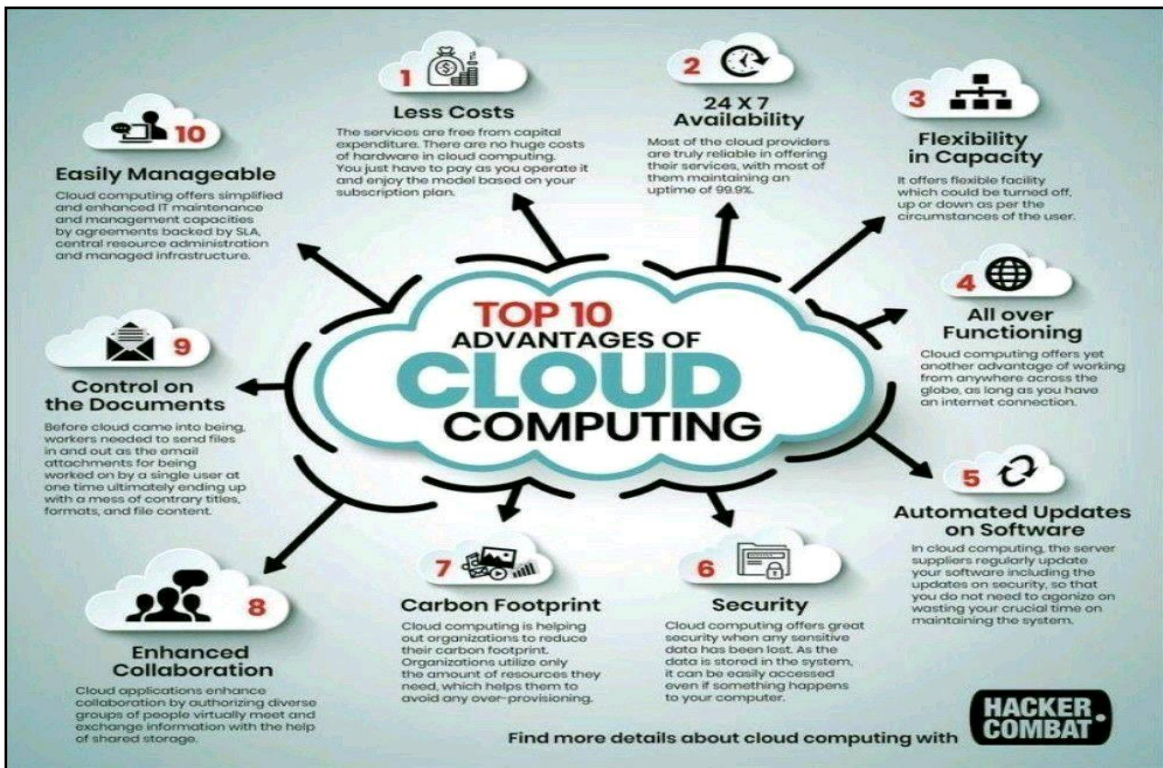
Always keep your 'expected salary' 10% higher than the industry standard salary. Regardless of whatever salary you are expecting, you have to justify why company should pay you XX amount.

Elaborate on your skills, your achievements.

Source: <https://content.techgig.com/10-most-asked-job-interview-questions-for-b-tech-freshers/articleshow/87711266.cms>



Mr. Akshay Agrawal,
Assistant Professor



- MRS. YOGITA MANE
(H.O.D)

Omicron Variant: What You Need to Know

Emergence of Omicron

On November 24, 2021, a new variant of SARS-CoV-2, B.1.1.529, was reported to the World Health Organization (WHO). This new variant was first detected in specimens collected on November 11, 2021 in Botswana and on November 14, 2021 in South Africa.

On November 26, 2021, WHO named the B.1.1.529 Omicron and classified it as a Variant of Concern (VOC). On November 30, 2021, the United States designated Omicron as a Variant of Concern, and on December 1, 2021 the first confirmed U.S. case of Omicron was identified.

CDC has been collaborating with global public health and industry partners to learn about Omicron, as we continue to monitor its course. CDC has been using genomic surveillance throughout the course of the pandemic to track variants of SARS-CoV-2, the virus that causes COVID-19, and inform public health practice. We don't yet know how easily it spreads, the severity of illness it causes, or how well available vaccines and medications work against it.



What We Know about Omicron??

Infection and Spread

- **How easily does Omicron spread?** The Omicron variant likely will spread more easily than the original SARS-CoV-2 virus and how easily Omicron spreads compared to Delta remains unknown. CDC expects that anyone with Omicron infection can spread the virus to others, even if they are vaccinated or don't have symptoms.

- **Will Omicron cause more severe illness?**

More data are needed to know if Omicron infections, and especially reinfections and breakthrough infections in people who are fully vaccinated, cause more severe illness or death than infection with other variants.

- **Will vaccines work against Omicron?**

Current vaccines are expected to protect against severe illness, hospitalizations, and deaths due to infection with the Omicron variant. However, breakthrough infections in people who are fully vaccinated are likely to occur. With other variants, like Delta, vaccines have remained effective at preventing severe illness, hospitalizations, and death. The recent emergence of Omicron further emphasizes the importance of vaccination and boosters.

- **Will treatments work against Omicron?**

Scientists are working to determine how well existing treatments for COVID-19 work. Based on the changed genetic make-up of Omicron, some treatments are likely to remain effective while others may be less effective.

What CDC is Doing to Learn about Omicron ??

Virus Characteristics

CDC scientists are working with partners to gather data and virus samples that can be studied to answer important questions about the Omicron variant. Scientific experiments have already started. CDC will provide updates as soon as possible.

Variant Surveillance

In the United States, CDC uses genomic surveillance to track variants of SARS-CoV-2, the virus that causes COVID-19 to more quickly identify and act upon these findings to best protect the public's health. CDC established multiple ways to connect and share genomic sequence data being produced by CDC, public health laboratories, and commercial diagnostic laboratories within publicly accessible databases maintained by the National Center for Biotechnology Information external icon (NCBI) and the Global Initiative on Sharing Avian Influenza Data external icon (GISAID). CDC's national genomic surveillance can detect a variant that is circulating at 0.1% frequency with 99% statistical confidence.

Source: <https://www.cdc.gov/coronavirus/2019-ncov/variants/omicron-variant.html>

**- MRS. SANKETI RAUT
(Assistant Professor)**

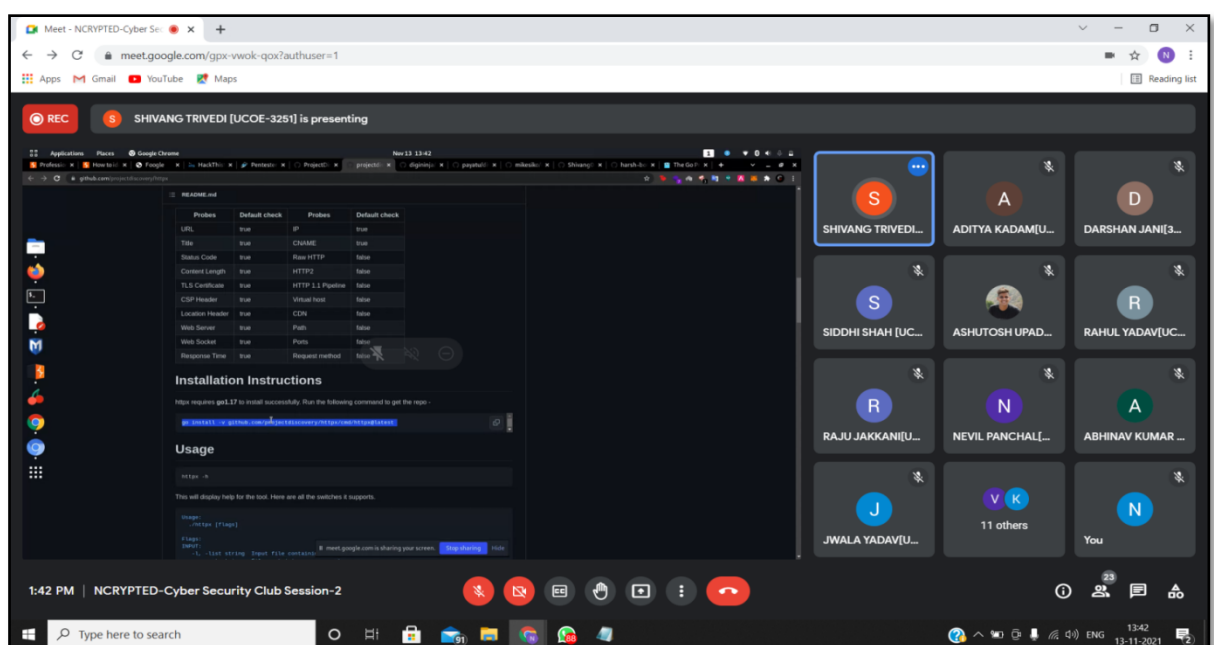
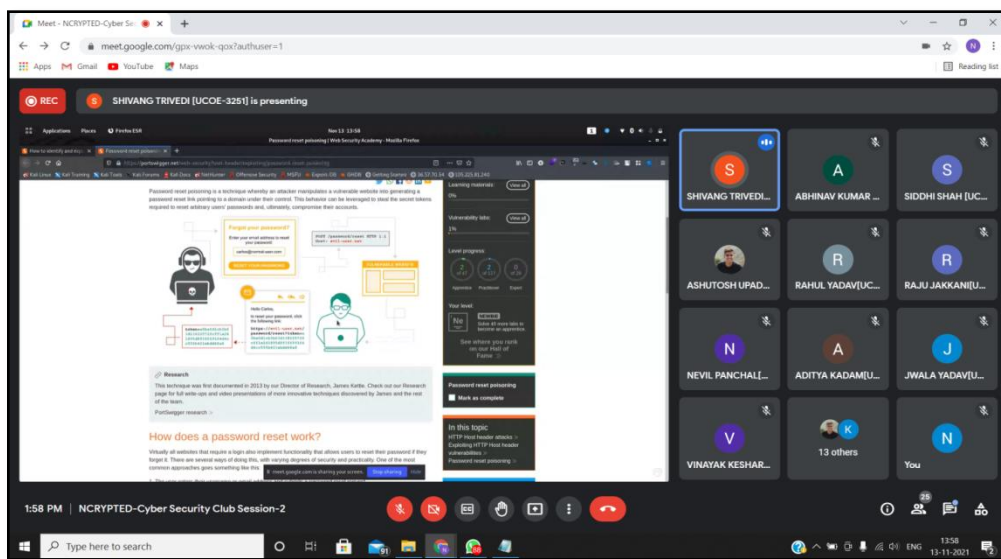
A hands-on session on - A Lab Setup to Cyber Security

A hands-on session was conducted on – A lab setup to Cyber Security organized by Ncrypte - Cyber Security Club of UCoE on Saturday November 13th, 2021 from 01:00 p.m. to 03:00 p.m.

Total 25 participants have attended the session. Speaker was Mr. Shivang Trivedi: who is an experienced Tester with a demonstrated history of working in the internet industry. Skilled in C++, Vulnerability Assessment, HTML, Computer Security, Bug Bounty and Ethical Hacking.

Participants will be able to learn:

- Different tools required for lab setup.
- Installation of those tools.
- Working of the tools.

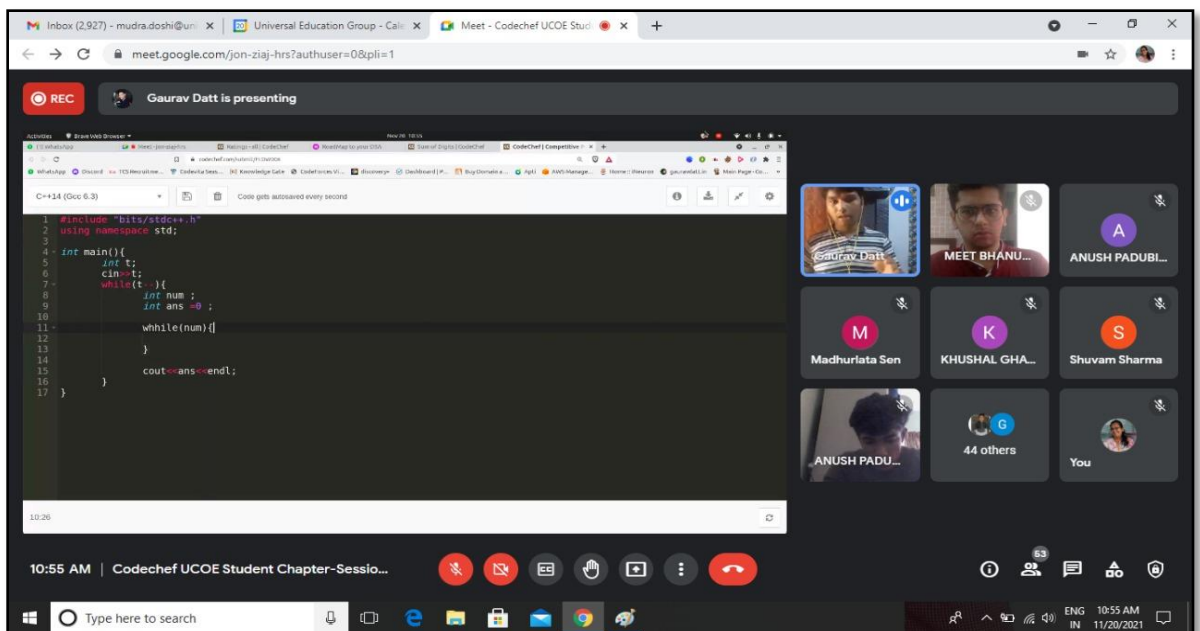
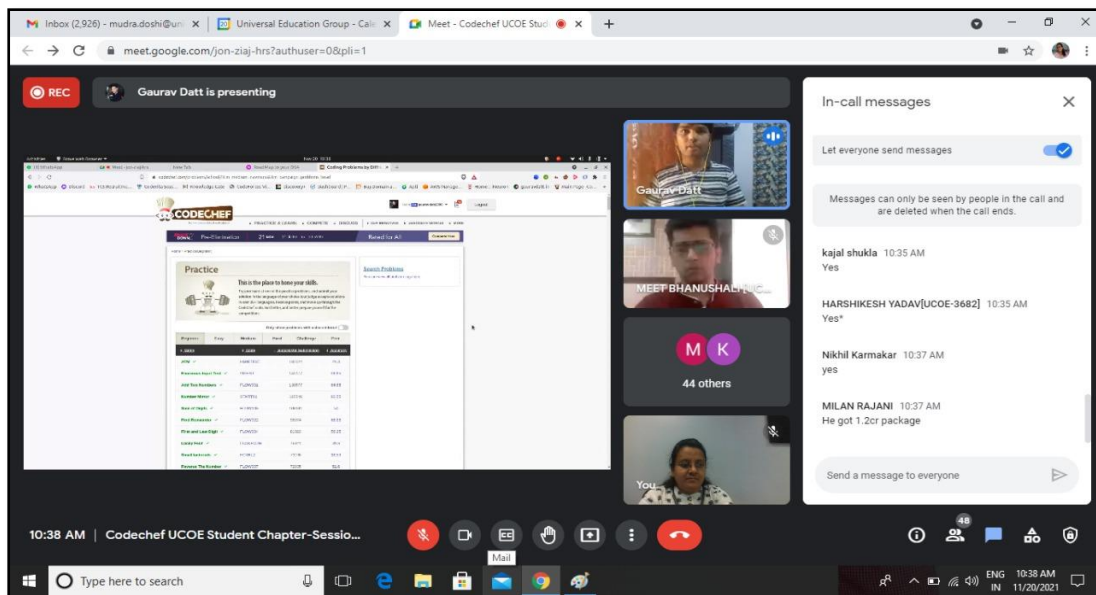


A hands-on session on - How to get started with Data Structures and Algorithms

A hands-on session was conducted on – How to organized by Code Chef - UCoE Chapter on Saturday November 20th, 2021 from 10:30 a.m. to 11:30 a.m. Total 51 participants have attended the session. Speaker was Mr. Gaurav Dutt: four-star coder in CodeChef and various other competitive programming platforms. Experienced and efficient at Data Structures and Algorithms.

Participants will be able to :

- Learn the relevance of CodeChef and Competitive programming communities.
- Get started with the basics of Data Structures and Algorithms.



STUDENT'S PLACEMENT FOR A.Y. 2021-22



DOSHI AASHKA



DEDHIA CHANDRESH



MOGAVEERA RACHITA



JEET DOSHI



JINAL PADHIAR



SONIA BAGALKOT



PAYAL CHAUDHARY



SATISH ALOUDICHYA



HARSHIKA PARMAR



KUNAL VISHWASRAO



SHUBHAM GOGRI



ROSHAN MAUR

Heartiest Congratulations for getting placed in various esteemed organization like Wipro, Hexaware, TCS and Wonderbiz with a whopping package. Wishing you all the best for your future endeavors...!!!

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