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Principal's Desk

It is my pleasure to welcome you to SRMS College of Engineering Technology & Research, an Institution under Shri Ram Murti Smarak Trust (SRMS). The evolution of the institute has witnessed strong blend of state-ofthe-art infrastructure and intricately intertwined human resource committed to provide professional education with thrust on creativity and innovation. The motivating environment in SRMS College of Engineering Technology & Research for knowledge assimilation, generation and dissemination with a sense of social responsibility, human values and concern for social commitment has carved a niche for itself among the best technical institutes.

The special emphasis is on Outcome Based Education (OBE) and Experiential Learning. The academic activities concentrate on helping the students to gain an excellent theoretical knowledge base and in the development of skills to implement them. We are constantly reviewing our set up to update and improve while making sure that students gain thinking skills, analytical frameworks, entrepreneurial skills, interpersonal and communication skills.

There is also an ample of scope in co-curricular and extracurricular activities at SRMS College of Engineering Technology & Research wherein the students are encouraged to show their talents. The College ensures that the students prove themselves to be not only well qualified engineers but also very responsible and ideal citizens of our country.

> Dr. L. S. Maurya **Principal**

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SHRI RAM MURTI SMARAK COLLEGE OF ENGINEERING, TECHNOLOGY & RESEARCH

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SRMS CETR ORGANISED A CODING COMPETITION DURING ITS 'ZERO HOUR'

'Programming is the art of algorithm design and the craft of debugging errant code'. In this context, **Department of Computer Science and Engineering** at **SRMS CET&R**, **Bareilly** organized a college level 'Coding Competition' as a 'Zero Hour Activity' on Thursday, January 5, for students of **B.Tech second year** in well-equipped Computer labs.

The activity was a fantastic opportunity for the students to effectively improve and sharpen their coding skills. The students put their skills to test as they worked their way through multiple rounds of algorithms. There was an active participation by the second-year students as the coding questions were basically based on JAVA.

1st position was secured by: Shekhar Singh (2021)

2nd position was secured by: Mathew Edmund (2021)



INTRA COLLEGE CRICKET MATCH

The Department of Computer Science and Engineering at Shri Ram Murti Smarak College of Engineering, Technology and Research SRMS CET&R, Bareilly had organized a 'Cricket' match between first year and second year students in the main college ground on January 19th, 2023, as a part of 'Zero Hour Activity'. The match started in the presence of SRMS CET&R Principal, Professor Dr. L S Maurya, Chief Proctor Dr. Rajeev Kumar Pandey and all the faculty members.

The toss was won by the second-year students' team, who decided to bowl first. The opening batsman from first-year team played very nicely, and gave a good start, which was quite a challenge for the other team with a target score of 40 runs in 5 overs. Both the teams showcased their strength of batting & bowling abilities and played extremely well. There was a huge crowd of students who had gathered in the playground to cheer their respective teams.

The first-year students team batch (2022) won the match by 10 runs and 5 wickets.

The students in the winning team were: Prasoon Singh, Adil, Tarun Singh, Praveen, Ram Rastogi, MohammadSaif, AbhinavKanaujiya, HarshKumar, Aryan, YashSharma, Ravindra, Shivam.



All the players/students of the winning team were given certificate of appreciation.

It was a supremely enjoyable match of cricket, the moments of which will always remain etched in the students' memories.

SRMS ENGINEERING & RESEARCH STUDENTS FLAUNT SPORTY-SKILLS

As a part of the 'Zero Hour Activity' of the Shri Ram Murti Smarak College of Engineering, Technology & Research (SRMS CET&R), Bareilly, an enthusiastic 'Badminton' match was organised by the **Department of Computer** Science and Engineering on January 19, 2023 in the presence of SRMS CET&R Principal Professor (Dr.) L S Maurya, Chief Proctor Dr. Rajeev Kumar Pandey, Sports Instructor Renu Rohra and all the faculty members. The exciting match witnessed participation of first and second year girls who played with great zeal and high spirits. The match was contesting and the crowd appreciated the game with loud cheers. It was a great platform for girls to flaunt their sportyside.



The winners of the match were:

1st Position:



Muskan Gangwar (Batch 2022)

2nd Position:



Ishika Agarwal (Batch 2022)

The winners were appreciated with certificates which motivate students to take part in similar extracurricular activities.

REPUBLIC DAY CELEBRATIONS WITH PATRIOTIC FERVOUR

Celebrating the spirit of freedom and love for the Nation, SRMS CET&R celebrated 74th Republic Day and Basant Panchami on January 26, 2023 at college campus with great patriotic spirit and blessings of Maa Saraswati, Goddess of knowledge and wisdom.



The program commenced with reminiscing and paying floral tribute to Late Shri Ram Murti ji, followed with flag hoisting by Shri Dev Murti, Chairman SRMS Trust, along with Principal SRMS CET&R Dr. L S Maurya, Director Law college Prof Dr. Naseem Akhtar ,Principal Law college: Dr. Mukut Bihari Lal Sharma , Principal Nursing college: Dr. Rintu Chaturvedi and other dignitaries. This was accompanied by the rendition of National Anthem led by the students choir.

The programme and the celebration moved forward with cultural events including patriotic songs, poetry and speeches by the students of B.Tech, Law and Nursing, which aroused the feelings of love and brotherhood among all.

This was followed by motivational address by the Chairman SRMS Trust Shri Dev Murti and Principal Dr. L S Maurya.

The program proceeded further with the scholarship distribution to the students. The first year students of (Batch 2022) were awarded with **Entry Level Scholarship Test 2022,** while the second year students (Batch 2020) and first year (Batch 2021) received **Academic Scholarships by SRMS Trust**.

Later, scholarship distribution took place, wherein first year students of Batch 2022 were awarded with Entry **Level Scholarship Test 2022**, while the students of second year batch 2020 and first year batch 2021 received **Academic Scholarships by SRMS Trust.**

The program ended with vote of thanks extended by the **Tanisha Saxena**, **President**, **Verve Club**, followed by Prasad Distribution and High Tea.













BASANT PANCHAMI CELEBRATIONS -26 JANUARY 2023



STUDENT CORNER

Internet of Things (IOT)

The term "Internet of Things" (IOT) was coined by Kevin Ashton at a presentation to Proctor & Gamble in 1999. He is one of the founders of the Massachusetts Institute of Technology's Automatic Recognition Lab. He pioneered RFID (used in barcode detector) technology in the field of supply chain management. He also founded Zensi, a company that manufactures energy sensing and monitoring technologies.

The Internet of Things is an emerging topic of technical, social and economic importance. Consumer products, durable goods, cars and trucks, industrial components and facilities, sensors, and other everyday objects are combined with internet connectivity and powerful data analysis capabilities that promise to transform the way we live and work.

The definition of the Internet of Things (IOT) is not definitively limited and not currently defined, meaning that there is no general definition approved by the majority or by the global user community, and therefore the Internet of Things is maturing and continuing to be the newest, most popular concept in the world of information technology.

The "Thing" in IOT can be any device with any type of sensor embedded with the ability to collect data and transmit it across the network without manual intervention. The technology embedded in the object helps to interact with internal states and the external environment, which in turn aids in the decision making process.

The sharing of IOT based systems in all aspects of human lives and the various technologies involved in transferring data between embedded devices made it complex and led to many problems and challenges. These include security, privacy, interoperability and standards, legal, regulatory and emerging economies and development.

Source: https://revolutionized.com

Compiled By: Mohd Ammar Ahmad B.Tech (Third Year) CS

TECH NEWS

LITHIUM IS FOUND IN INDIA EARLIER WE HAVE TO EXPORT THE LITHIUM FROM THE OTHER COUNTRIES LIKE Chile has the largest lithium reserves worldwide by a large margin. Australia comes in second, with reserves estimated at 6.2 million metric tons in 2022.

BUT NOW ITS FOUND IN INDIA NEAR JAMMU AND KASHMIR APPROX , 5.9 MILLION TON OF LITHIUM IS FOUND AT THE PLACE .. SO NOW ITS VERY EASY TO BUILD LITHIUM ION BATTERY INSIDE THE COUNTRY THE EFFECTIVE COST MUST GOT MORE LESS .

JOBS GETTING LOST IN THE TECH INDUSTRY Twitter layoffs are back again, this time, reportedly affecting the workers in the product team. As per latest reports, the Elon Muskled company is planning to sack around 50 employees in the coming weeks.

According to a report in Insider, billionaire Elon Musk's decision to lay off more employees from the product team comes only six weeks after he allegedly told employees that there would be no more Twitter layoffs. However, with this latest update of layoffs at Twitter, the report adds that the company may now operate with less than 2,000 people.

AMAZON,

After days of making headlines, Amazon layoffs have reportedly finally hit the workers of the Jeff Bezos-led company. In what is being touted as the largest job cuts in its history, this round of Amazon layoffs is reportedly affecting workers in the US, Canada and Costa Rica.

STUDENT CORNER

According to a report in Bloomberg, as of Wednesday, Amazon plans to axe as many as 18,000 people. These layoffs come at a time when the Jeff Bezos-led company tries to grapple with slowing online sales growth and prepares itself to face a possible recession as the world economy takes a hit.

MICROSOFT

In a fresh round of mass layoffs, it is the Microsoft layoffs. As per media reports, just days after vacating its US office along with Meta, the tech giant, Microsoft, is resorting to axing as many as 11,000 jobs.

According to reports in Reuters and Bloomberg, Microsoft layoffs are expected to impact the workforce in engineering and HR departments. However, it must be noted that Microsoft has officially not confirmed the number of employees that will be handed pink slips. If the reported number of 11,000 jobs to be axed is true, then, it could mean that nearly 5 per cent of the company's workforce may be let go.

Source: Outlook, BBC TechNews

Compiled By: Adhiraj Singh B.Tech (First Year) CS

Invention of Internet

The invention of the internet is a fascinating and complex story that has played a significant role in shaping the modern world. It is a story that involves the contributions of multiple individuals and organizations, spanning across several decades.

The internet, as we know it today, can trace its origins back to the 1960s, when the US Department of Defense developed a network of computers called ARPANET (Advanced Research Projects Agency Network). This network was designed to allow researchers from different locations to share information and collaborate on projects.

One of the key figures behind the development of ARPANET was Leonard Klein rock, a computer scientist who developed the mathematical theory of packet switching, which is a key component of modern internet technology. Packet switching involves breaking down data into small packets, which can be transmitted over a network and reassembled at their destination.

Another important figure in the early development of the internet was Robert E. Kahn, who worked on the development of the Transmission Control Protocol (TCP), which is a set of rules that govern the way data is transmitted over the internet. TCP is still used today as a fundamental component of the internet.

In the 1970s, the internet began to expand beyond the confines of the ARPANET, as other organizations and institutions began to connect to the network. This included universities, research centers, and government agencies.

One of the key factors that enabled the growth of the internet was the development of the Domain Name System (DNS), which is a system that translates domain names (such as www.google.com) into numerical IP addresses, which are used to identify specific computers on the internet. The DNS was developed by Paul Mockapetris in the 1980s and is still used today as a fundamental component of the internet.

In the 1980s, the internet began to gain wider public attention, as it became more widely available to the general population. This was due, in part, to the development of personal computers and the increasing affordability of home internet connections.

Today, the internet is a global network that connects billions of people and devices, and it has become an essential tool for communication, education, commerce, and entertainment.

Compiled By:
Priyanshi Agarwal
B.Tech (Second Year) CS

FACULTY ARENA

No-code vs. Low-code

You may have heard the phrases "no-code" and "low-code" being used in reference to building software. If you're new to the world of no-code/low-code, you might be wondering what these terms actually mean.

At a high level, "no-code" is all about building software without writing any code. "Low-code" involves writing some code, usually when adding custom elements to a no-code project.

What is no-code development?

No-code development lets you build entire applications without writing a single line of code. Instead of working with code, you work with templates and drag-and-drop elements to create fully-functioning software.

"No-code is the first, most accessible, step of web and software development. It allows anyone to create software, visually, without writing code," says **Ben Tossell, the Founder of Makerpad**, a no-code community.

If you're new to programming, no-code tools can be a great place to start. Working with no-code can help you get a sense for how software is built — that there's a front end, back end, and application programming interfaces (APIs) that talk to external apps, to name a few things. Getting that high-level understanding can be really helpful before diving into a specific programming language.

No-code tools also help software developers get projects off the ground quickly. Instead of building routine applications from scratch, no-code tools can be used, leaving developers with more time to tackle the interesting and challenging problems.

No-code tools

Here are some tools that show what's possible with no-code:

- 1. Zapier:- links web applications together to create automated workflows. For example, you can program Slack to notify you when you get an important email, or when a calendar event is about to start. Zapier takes care of the communication between web APIs that make these integrations possible.
- 2. <u>Airtable</u>:- lets you work with databases, all while interacting with a spreadsheet. You can create databases to manage digital assets, track bugs, and schedule content. And you don't need to know any SQL.
- 3. Webflow:- helps you get your website off the ground, with a visual editor that functions much like front-end coding. With some web development knowledge, you can mix and match HTML elements and add CSS styling, all without having to write any code. Webflow also lets you integrate CMS and ecommerce capabilities into your site.
- 4. <u>Circle</u>:- helps you create a community space for hosting discussions, sharing content, and creating unique membership experiences. You can host communities around your courses, products, coaching services, and more.
- 5. **Gumroad:** sets artists and creators up with an e-commerce solution, taking care of things like payment processing, file hosting, and aspects of marketing and communications. Creators can put their work up for sale, including illustrations, music, games, films, ebooks, and much more.
- 6. <u>Carrd</u>:- lets you create simple one-page sites for pretty much anything. You can quickly build and launch profile sites, portfolios, landing pages, and forms, to name a few examples.

FACULTY ARENA

- 7. ConvertKit:- helps you automate emails and stay in touch with clients and customers. You can design your own email templates, and even program emails to go out based on actions taken in apps like Shopify, Teachable, and Crowdcast. ConvertKit also lets you build landing pages and sign-up forms to help grow your email list.
- 8. Obviously AI:- trains machine learning algorithms to help you make data predictions. You can bring data sources, such as PostgreSQL, MySQL, and Salesforce. And get predictions for revenue forecasts, inventory demands, customer behavior, and much more. All without having to work with Python, R, SQL, or other data science languages.
- 9. <u>Glide</u>:- helps you build mobile apps directly from a Google spreadsheet. You can build anything from an employee directly, to a conference app, to a habit tracker.
- 10. **Landbot:** creates chatbots for your website. You can use it to greet visitors with fun GIFs and visuals, guide people through your site, and create forms designed as conversational prompts.
- 11. **<u>Bubble</u>**:-lets you create a variety of web applications, with powerful database and API features. You can build anything from analytics dashboards, to marketplaces for physical goods, to job boards.
- 12. <u>Coda</u>:- brings together your documents, spreadsheets, kanban boards, calendars, and more. It's kind of like a central hub for teams, or individuals, to house their knowledge.

- 13. <u>Niro</u>:- helps you create multi-page web forms, called "clickflows." You can turn forms into quizzes and questionnaires that help you identify potential customers, ask existing customers for feedback, or match site visitors with products that they might like.
- 14. <u>Scapic:</u> helps you create 3D product visuals for your online store. Your customers can view the product on your site, or in their own space using augmented reality.
- 15. **Voiceflow:** lets you build voice apps for Alexa and Google. You can easily create voice apps using drag-and-drop blocks that represent the logic and structure of your app.

What is low-code development?

Low-code development lets you build software with minimal coding. Working with low-code tools, you can build most of an application using templates and drag-and-drop elements. For features that are not readily available, you can add code snippets that bring these elements into your application. Unlike no-code, low-code development requires some basic understanding of programming.

"I think code, low-code, and no-code are all on the same spectrum of 'software development.' No-code is the first step — the lowest rung on the ladder. Traditional coding, as we all think about it today, is the very top rung of the ladder. And low-code sits in the middle," Ben tells us.

Low-code tools

What tools are used in low-code development? Many of these are no-code tools that let you take things to the next level with code snippets. Here are a few to check out:

FACULTY ARENA

- 1. <u>Velo by Wix</u>:- lets you add JavaScript to your Wix site. You can make your site elements more interactive, whether that's programming a pop-up message or displaying information from a third-party API. You can also change how certain site elements look by adding custom CSS to the Wix Editor.
- 2. <u>Code by Zapier:</u> lets you add snippets of JavaScript or Python code, for tons of custom functionality. You can add code snippets for extracting data from large amounts of text, or for limiting the number of times your automation runs per hour.
- 3. <u>Airtable Developers</u>:- helps you take a low-code approach to Airtable. With a bit of JavaScript, you can pull images from Unsplash, uncover insights across different tables, and automate repetitive tasks. You can even install pre-written code snippets using the Airtable Scripting App marketplace.
- 4. Retool:-lets you build internal tools for your team. With basic knowledge of SQL, you can bring in data from other places to build all sorts of apps, dashboards, admin panels, and more. Retool lets you connect to most databases or anything with a REST, GraphQL or gRPC API. And you can write JavaScript code to change how data appears in your custom tools.
- 5. **8base:** helps you set back-end up infrastructure through what's called backend-as-a-service. You can spin up servers, manage databases, store images and videos, safely authenticate users, and more. With knowledge of GraphQL, you can query your back end through a single API point. 8base is great for helping frontend developers build full-stack applications.
 - 6. <u>Autocode</u>:- lets you build custom integrations between web applications like Discord, Strava, and Slack. Using an

in-browser development environment, you can access an API library and generate code using features like autocomplete. Autocode is great for more complex workflows and integrations that are harder to create using purely no-code tools.

Compiled By: Mr. Pradeep Kumar Assistant Professor

HOW THINGS HAVE CHANGED!!!



Compiled By: Ms. Ruchie Sah Assistant Professor

HEALTH TIPS

- Follow a Heart-Healthy Diet
- Eat well throughout the day
- Use intermittent fasting to control calories and boost endurance
- Be satisfied and practice gratitude daily
- Stop engaging in risky behavior

LOGIC PUZZLE

The Puzzle:



Four adventurers (Alex, Brook, Chris and Dusty) need to cross a river in a small canoe.

The canoe can only carry 100kg.

Alex weighs 90kg, Brook weighs 80kg, Chris weighs 60kg and Dusty weighs 40 kg, and they have 20kg of supplies.

How do they get across?

Our Solution:

Chris and Dusty row across, Dusty returns.

Alex rows over, and Chris returns.

Chris and Dusty row across again, Dusty returns.

Brook rows across with the Supplies, and Chris returns.

Chris and Dusty row across again for the last time.

(Note: some variations on this are possible)

DO YOU KNOW

Q:1. When Amazon started extending its services as cloud? 1.1969 2.1999 3.2003 4.2006 Answer: 4. 2006	Q:5. IIoT stands for
Q:2. The cloud infrastructure is operated for the exclusive use of an organization. 1.Public 2.Private 3.Community 4.All of the above Answer: 2. Private	Q:6. What does design provide? 1.Technology 2.Ecosystem 3.Technology and ecosystem 4.Digital revolution Answer: 3.Technology and ecosystem
Q:3. How much carbon emission can be reduced by moving to cloud? 1.65% 2.88% 3.15% 4.50% Answer: 2. 88%	Q:7. Which possibility connects the production line to suppliers? 1. Transportation and logistics 2. Energy and utilities 3. Automotive 4. Connected supply chain Answer: 4. Connected supply chain
Q:4. Which cloud service in on top of Gartner Magic Quadrant from several years? 1.IBM Cloud 2.Azure 3.Alibaba cloud 4.AWS Answer: 4.AWS	Q:8. Which possibility provides inter connectivity between shop floor and top floor? 1. Transportation and logistics 2. Energy and utilities 3. Plant control flow operation 4. Connected supply chain Answer: 3. Plant control flow operation

CONGRATULATIONS

SHRI RAM MURTI SMARAK COLLEGE OF ENGG., TECH. & RESEARCH, BAREILLY

STUDENTS PLACED IN VARIOUS COMPANIES B.Tech CS BRANCH 2019-2023 BATCH

Name	Company	Package
AKANSHA PANDEY	GENPACT INDIA	3 LPA
AMAN DEEP SINGH	GENPACT INDIA	3 LPA
MOHD TABISH HASAN	GENPACT INDIA	3 LPA
SARTHAK BOHRA	GENPACT INDIA	3 LPA

SARTHAK KHANDELWAL	TECH MAHINDRA	3.25 LPA
RAJ NANDINI GUPTA	TCS	3.36 LPA
PRATEEK NAGAICH	PLANET SPARK	6.5 LPA
JASLEEN SINGH	TCS	7 LPA
VANSH SAXENA	TCS	7 LPA