KAMARAJ
COLLEGE OF ENGINEERING & TECHNOLOGY

(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)
S.P.G.Chidambara Nadar - C.Nagammal Campus
S.P.G.C. Nagar, K.Vellakulam – 625 701 (Near VIRUDHUNAGAR).

DEPARTMENT OF INFORMATION TECHNOLOGY

INFO TECH SPARK

INFO TECH SPARK - NEWS LETTER- 2025

VOLUME 1 ISSUE 2

CONTENTS

VISION OF THE INSTITUTION

To make this Institution the unique of its kind in the field of Research and Development activities in this part of world.

MISSION OF THE INSTITUTION

To impart highly innovative and technical knowledge to the urban and unreachable rural student folks through "Total Quality Education".

QUALITY POLICY

Committed to impart Quality Technical Education imbibed with proficiency, human values and continual improvement.

VISION OF THE DEPARTMENT

To make the department of Information Technology the unique of its kind in the field of Research and Development activities in this part of world.

MISSION OF THE DEPARTMENT

To impart highly innovative and technical knowledge in the field of Information Technology to the urban and unreachable rural student folks through Total Quality Education.

PROGRAM EDUCATION OBJECTIVE (PEOs)

PEO1: Technical Knowledge

Graduates will be able to identify, analyze and create solutions for real life, industrial and societal needs by applying the principles and practices of Information Technology.

PEO2: Teamwork & Ethics:

Graduates will be able to collaborate effectively and ethically in a multi-disciplinary team as a member & as a leader.

PEO3: Lifelong Learning :

Graduates will be able to adopt the contemporary technologies in the field of Information Technology to provide solutions for challenging environments.

PROGRAM SPECIFIC OUTCOMES (PSOs)

Engineering Graduates will be able to:

PSO 1: Demonstrate technical and interpersonal skills to design and develop IT enable solutions to meet the real time industrial and societal needs.

PSO2: Exhibit an ability to adapt to the evolutionary changes in computing.

PROGRAM OUTCOMES (POs):

Engineering graduates will be able to:

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety and the cultural, societal, and environmental considerations.

PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7: Environment and Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of and need for sustainable development.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

ABOUT THE DEPARTMENT:

Information Technology is one of the most dynamic fields in the modern world. Information Technology or "InfoTech" evolved when computing and communicating technologies amalgamated. It prepares the students to meet the technical demands of business, government, healthcare, military, education, and other organizations. Information Technology is used in almost every sphere of profession, making the process much easier, by developing competent and effective solutions to real life problems. IT sector is growing at fast pace and creating ample opportunities in India and abroad for deserving candidates having employable skills Department of Information Technology was established in the year 2001 and has 10 vibrant and well qualified teaching faculty members expertise in various fields of Information Technology who exerts dedicated work to produce high caliber technocrats. Of them, three have completed their doctoral degrees and four of them are pursuing their doctoral degrees. The objective of the department is to prepare the students to face challenges in the changing world. IT Professionals will find their career in various key areas like Artificial Intelligence, Augmented Reality, Data Analytics, Networking, Data Management, Multimedia and Computer graphics, Communications, Web Technology, Software Designs, Management and Administration of Systems.

HEAD OF THE DEPARTMENT:

Dr.E.Vakaimalar heads the Department of Information Technology since September 2022. She received her Doctorate in Philosophy under the Faculty of Information and Communication Engineering from Anna University, Chennai. She completed her PG in Computer Science and Engineering in Mepco Schlenk Engineering College from Sivakasi & UG in Computer Science and Engineering from Periyar Maniammai College of Engineering and Technology for Women, Thanjavur. She has 25 years of Teaching Experience. Her area of interest includes Image processing, computer vision and data mining.

KNOWLEDGE ENRICHMENT

Technical terms in technology:

1. Ad hoc network :

An ad hoc network is a network that is established for a single use, instead of an ongoing connection. An example would be a connection between your phone's hotspot and a friend's computer.

2. Breadcrumbs:

Breadcrumbs are an element of user experience that makes websites easier for users to navigate. Websites and software use breadcrumbs to create a visual path from one page to another.

3. CTR:

The click-through rate is the number of a people who click a link over a period of time, either on a webpage or in a marketing email to access a webpage. It is used to gauge the success of the marketing attached to the link.

4. Denary:

Denary is a number code that uses the numbers one through 10 to represent all characters, similar to binary code.

5. EOL:

EOL is a label given to hardware and software that is no longer widely used to signify that the company that originally produced it is no longer putting resources into that product. It is an acronym for end of life.

6. Filter:

Refers to a program that has the function of translating data into a different format (Example: a program which is used to import or export data or a particular file)

7. Gateway:

A gateway is the point in one system where it connects to another system.

8. Incremental Backup:

A small increment of data backup only copying changes to the data since the previous backup.

9. LAN:

LAN is an acronym for local area network, which is a network that has a limited geographical range.

10.MIME:

Multipurpose Internet Mail Extensions; a protocol that enables you to include various types of files (text, audio, video, images, etc.) as an attachment to an e-mail message.

11.NNTP:

Network News Transport Protocol; the protocol used for posting, distributing, and retrieving network news messages.

12.OS:

An operating system (OS) is the software that manages all of a computer's processes and allows programs and applications to run.

13.Phishing:

Phishing is a term for fraudulent emails that are from scammers posing as businesses or organizations in order to manipulate the receiver into offering money or private information.

14.Ransomware:

Ransomware is a type of malicious software or malware, designed to deny access to a computer system or data until a ransom is paid.

15.Smishing:

The fraudulent practice of sending text messages purporting to be from reputable companies in order to induce individuals to reveal personal information, such as passwords or credit card numbers.

16.Two-factor authentication (2FA):

An extra level of security achieved using a security token device; users have a personal identification number (PIN) that identifies them as the owner of a particular token.

17.USB port:

An interface used for connecting a Universal Serial Bus (USB) device to computer; these ports support plug and play.

18.VPN:

Virtual Private Networking: a means of securely accessing resources on a network by connecting to a remote access server through the Internet or another network.

19.Wi-Fi:

Wi-Fi is a technology that allows you to access the internet without a physical wire connection. It is an abbreviated version of the term wireless fidelity.

20.Zip:

If you have a file that is too large to be sent over email or through a messaging service, you can compress the file so that it takes up less memory, and it's called creating a zip file

Mr.RAM GANESH G H,

AP/IT

Latest Techniques in Quantum Computing (QC)

1. Quantum Error Correction with Low-Overhead Codes

Error correction remains a cornerstone for making quantum computers scalable.

- In 2024, researchers developed new low-overhead quantum error-correcting codes like XZZX surface codes and LDPC (Low-Density Parity-Check) codes.
- XZZX codes show better tolerance to biased noise (where certain errors happen more often).
- LDPC codes allow faster decoding algorithms and are scalable to larger systems.
- Companies like Google and IBM are integrating these codes into their next-generation processors, aiming for fault-tolerant quantum computers with fewer physical qubits.

2. Logical Qubits and Fault-Tolerant Gates

A major 2024 advancement was the creation of logical qubits with continuous error correction.

- IBM demonstrated logical gates between two logical qubits using real-time feedback.
- IonQ's trapped-ion systems showed fault-tolerant single-qubit rotations.

Logical qubits are combinations of many physical qubits that act as a single, error-protected unit.

The ability to perform fault-tolerant gates without introducing additional errors is a critical step toward scalable quantum algorithms like Shor's algorithm or Grover's search.

3. Neutral Atom and Photonic Quantum Computing

Alternative qubit technologies are progressing rapidly:

- Neutral Atom QC: Companies like QuEra are using arrays of ultra-cold atoms manipulated by lasers. They achieved high-fidelity two-qubit gates in 2024.
- Photonic QC: PsiQuantum is developing large-scale photonic quantum computers based on single-photon sources and integrated optics.

These approaches offer easier scalability compared to superconducting or ion-trap systems and are seen as promising candidates for building million-qubit systems.

4. Quantum Simulation Techniques :

Quantum computers are showing superiority in simulating complex quantum systems, particularly in material science and drug discovery. Recent techniques:

- Variational Quantum Eigensolvers (VQE): Hybrid algorithms that use quantum processors for optimization problems.
- Quantum Phase Estimation (QPE) Enhancements: New robust variants of QPE have reduced the required circuit depth, making them more practical for near-term quantum hardware.
- Companies like Quantinuum and PASQAL are focusing heavily on specialized quantum simulators for solving real-world chemical and physical systems.

5. Error Mitigation for Noisy Intermediate-Scale Quantum (NISQ) Devices:

While fully error-corrected quantum computers are years away, today's NIS
Q devices (50–1000 noisy qubits) are being made useful via error mitigation techniques

Latest methods:

- Zero Noise Extrapolation (ZNE): Intentionally scaling noise and extrapolating results to zero noise.
- Probabilistic Error Cancellation: Statistically reversing the effects of noise.
- Symmetry Verification: Checking quantum states against known symmetries to detect and correct errors.
- These allow meaningful computations even without full error correction, and are widely implemented in 2024's cloud-accessible quantum processors (like IBM Quantum and AWS Braket).

HARISH RAGHAVENDRA S

22UIT080 - III IT

JUMBLED WORDS

TGDGEAS
ERNTTNEI
NNTNOVOAII
MTFINOROAIN
KONTRWE
GESAURMNT
MDMCONSA
RGRMOPA
FITREAECN
GNSITR

ANSWERS:

1.GADGETS
2.INTERNET
3.INNOVATION
4.INFORMATION
5.NETWORK
6.ARGUMENTS
7.COMMANDS
8.PROGRAM
9.INTERFACE
10.STRING

SHIVA SHREE R
23UIT017

INTERESTING FACTS ABOUT TECHNOLOGY

- The Firefox logo isn't a fox It's actually a red panda. It’s a common misbelief that the Firefox logo is a fox (I mean… it is in the name), but it is actually a red panda!

- Google's First Tweet was in binary.
- Google’s first tweet was in 2009, and it was gibberish to most.
- Translated from binary to English, it reads, “I’m feeling lucky”.
- I'm 01100110 01100101 01100101 01101100 01101001 01101110 01100111 00100000 01101100 01110101 01100011 01101011 01111001 00001010

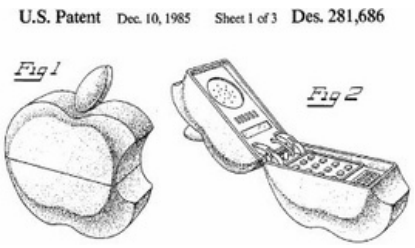
- Mark Zuckerberg is red-green colourblind, which means the colour he can see best is blue. This is why the colour blue dominates the Facebook website and mobile app.

- The average computer user blinks just 7 times a minute.
- It is said we blink seven times per minute instead of the usual 20 when using a computer. which is why your eyes dry out more while working in front of a monitor.

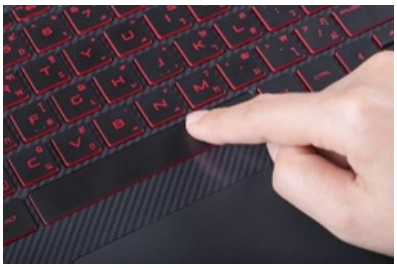
- YouTube was created to be a dating site.
- YouTube.com was registered on February 14th, 2005 (Valentine’s Day) with the purpose of being a video-dating site. It was designed as a way for people to upload videos of themselves talking about the partner of their dreams.
- But after some time when no one was uploading their videos, YouTube changed to allow uploading of any kind of video.

INTERESTING FACTS ABOUT TECHNOLOGY

- Over 500 hours of YouTube are uploaded every minute.
- As of May 2019, more than 500 hours of video were uploaded to YouTube every minute. This equates to approximately 30,000 hours of newly uploaded content per hour.
- Apple were originally designing an apple shaped flip phone before the first iPhone.
- Before the original design for an iPhone, Apple patented a phone design in the shape of an actual apple. It was a flip phone that, when closed, would look like the Apple logo.



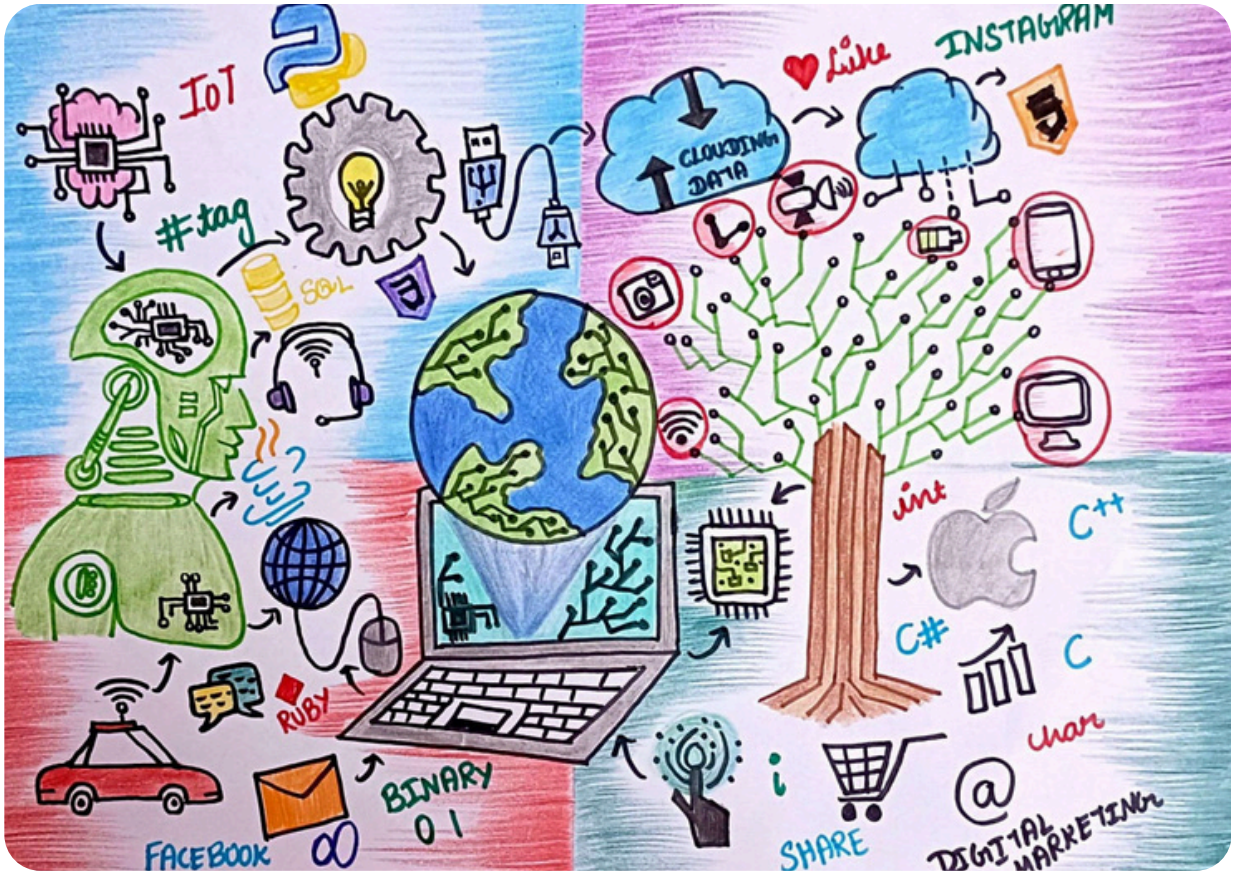
- The first computer mouse was rectangular and made of wood.
- It was invented by Douglas Engelbart in 1964. The mouse consisted of a single or pair of wheels to translate motion into movement on a screen. Engelbart patented the mouse as the 'X-Y Position Indicator for a Display System'.



- The space bar is being pressed about six million times every second around the world.
- At the starting of Amazon.com, it sells only books online not all products.

Done By:
CHARUMATHI M(23UIT057)
VARSHITHA R(23UIT067)

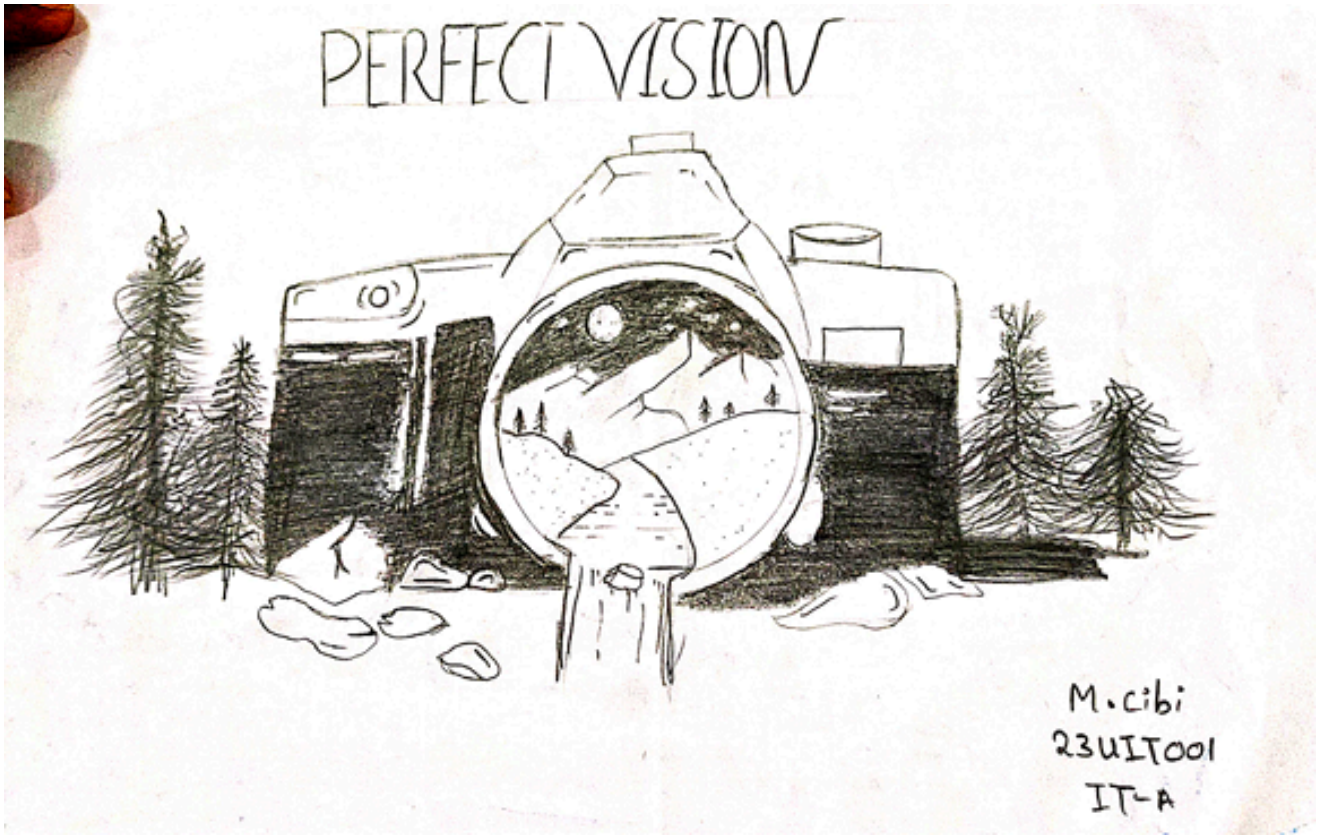
TECHNICAL DRAWINGS



R.HEMA MALINI

21UIT042 - II IT

TECHNICAL DRAWINGS



EVENTS ORGANISED

WORKSHOPS :

S.No	Name of the Event	Date of the Event	Year	Resource Person/Chief Guest
1	Data Visualization using Tableau	21.03.2025	III IT	Dr.J. Sofia Jennifer, Assistant Professor (Grade-III), Department of Information Technology, SSN College Of Engineering, Chennai
2	Cyber Forensics Tools and Techniques	15.02.2025	III IT	Mr.N.Aashiq Ahamed, Associate Security Engineer, Crossbow Labs

EVENTS ORGANISED

GUEST LECTURES :

S.No	Name of the Event	Date of the Event	Year	Resource Person / Chief Guest
1	Medical Coding	15.02.2025	III IT	Mrs.A.Archana Anandharajan, Certified Senior Medical Coder, Incrementum Healthcare, Mumbai.
2	Student as Corporate Ready Profession	12.02.2025	III IT	Mr. R. Arun Kumar,SKAIT IT Education PvtLtd. Coimbatore.

EVENTS ORGANISED

VALUE ADDED COURSES :

S.No	Name of the Event	Date of the Event	Year	Resource Person / Chief Guest
1	AWS Cloud Infrastructure and Services	17.02.2025 To 21.02.2025	II IT	Bevywise Networks Pvt Ltd, Tirunelveli.
2	PYTHON for Data Science	17.02.2025 To 21.02.2025	II IT	Elysium Academy Pvt Ltd, Madurai.
3	Advanced JAVA-Web application	17.02.2025 To 21.02.2025	II IT	Silicon Software Services, Madurai.

FDP/WORKSHOP/STTP/CERTIFICATION PROGRAMS ATTENDED

S. No.	Name of the faculty	Name of the Program	Organizing Institution	Participated / Presented
1	Ms.G.Nivetha	Front End Web Developer Certification	INFOSYS SPRING BOARD	Participated
2	Mrs. V. Deepa Priya	ORACLE JAVA International Certification	ORACLE	Participated
3	Dr.S.Akila Rajini	ORACLE JAVA International Certification	ORACLE	Participated
4	Ms.R.Saranya Priyadharshini	ORACLE JAVA International Certification	ORACLE	Participated
5	Dr. R. Arthy	ORACLE JAVA International Certification	ORACLE	Participated
6	Ms. S. Gayathri	ORACLE JAVA International Certification	ORACLE	Participated
7	Ms. P. Mahalakshmi	ORACLE JAVA International Certification	ORACLE	Participated

STUDENT ACHIEVEMENTS

S. No.	Roll Number	Name of the Student	Name of the Journal	Title of the Paper	Volume & Issue
1	22UIT047	Isaac Pradeep Raj KL	International Research in Advanced Science Hub	MediAura – An AI-Driven Healthcare Ecosystem for Seamless Medical Access	Vol. 07, Issue 03 March
2	22UIT115	Deepasri R			
3	22UIT054	Afrin Thayufa S			
4	22UIT079	Jeyalakshmi M			
5	22UIT051	Janavarshini G	International Research in Advanced Science Hub	A Blockchain and AI-Powered Digital Marketplac for Optimzing Agricultural Trade Efficiency and Farmer Empowerment	Vol. 07, Issue 03 March
6	22UIT096	Hemadharshini R			
7	22UIT056	Nooril Afina T			
8	22UIT106	Balaharish @ Yogesh N	International Research on Advanced Science Hub	Quantum computing in drug discovery	Vol. 07, Issue 03 March
9	22UIT072	Chellapandi TR			
10	22UIT104	Gnana Jersha J			
11	22UIT087	Madhubhavani G			
12	22UIT077	Mangalya T			
13	21UIT006	R.Nareshan	International Research Journal on Advanced Engineering and Management	Revolutionizing Wilms Tumor Detection: AI-Driven Precision in Pediatric Oncology	Vol 03, Issue:3rd March
14	21UIT015	M.Premkumar			
15	21UIT049	M.Vishal			

STUDENT ACHIEVEMENTS

S. No.	Roll Number	Name of the Student	Name of the Journal	Title of the Paper	Volume & Issue
16	21UIT005	M.Vinodhan	International Research Journal on Advanced Engineering and Management	Smart and Dynamic AI Powered Travel plaNning	Vol 03, Issue:3rd March
17	21UIT004	S.Suryaram			
18	21UIT030	M.Ganeshkumar			
19	21UIT059	Saamir Gaffur	International Research Journal on Advanced Engineering and Management	Real time Detection and Prediction of Debris Flow and Landslides using YOLO Models and AI driven Remote Sensing	Vol 03, Issue:3rd March
20	21UIT058	L.Praveen			
21	21UIT016	R.M Rajesh			
22	21UIT041	Sibi Siddharthan	International Research Journal on Advanced Engineering and Management	Realtime Deep Fake Detection using Machine Learning and SVM	Vol 03, Issue:3rd March
23	21UIT031	S.Dharun			
24	21UIT054	M.Kishore			
25	22UIT101	Sathana C	International Research Journal on Advanced Engineering and Management	Innovative approaches to secure image processing in decentralized evironment	Vol 03, Issue:3rd March
26	22UIT053	Rishwana Begam j			
27	22UIT055	Rohini V			
28	22UIT041	Evangelin D			
29	22UIT044	Muthu Subhashini V			

STUDENTS PARTICIPATION – TECHNICAL CONTEST

S. No.	Roll Number	Name of the Student	Name of the Programme / Event	Organizing Institution	Prizes Won / Cash
1	22UIT054	Afrin Thayufa S	Poster Presentation	Kalasalingam Academy of Research and Education	I(Rs. 5000)
			Code debugging	Anna University Regional campus, Madurai	II
			Electrofix	Anna University Regional campus, Madurai	II
			Word Chase	Anna University Regional campus, Madurai	I
2	22UIT115	Deepasri R	Code debugging	Anna University Regional campus, Madurai	II
			Electrofix	Anna University Regional campus, Madurai	II
			Word Chase	Anna University Regional campus, Madurai	I
3	22UIT079	Jeyalakshmi M	Code debugging	Anna University Regional campus, Madurai	II
			Electrofix	Anna University Regional campus, Madurai	II
			Word Chase	Anna University Regional campus, Madurai	I
4	22UIT112	Muthu H	Numinous	Anna University Regional campus, Madurai	II
5	22UIT107	Suriya Punnahai CP	Numinous	Anna University Regional campus, Madurai	II
6	22UIT119	Gowtham G	Numinous	Anna University Regional campus, Madurai	II
7	22UIT101	Sathana C	UI GOLF	Prometeo'25 at IIT Jodhpur	III
8	22UIT051	Janavarshini G	Mega ICT Quiz	IEEE CS Madras	II(Rs. 2500)
9	22UIT102	S.Sivasankarapandi	CODE BUSTERS	National Level Technical Symposium ELEXSIYA '25	I(Rs. 2000)
			National Level Technical Symposium MXCEL '25	Kongu College of Engineering	I(Rs. 2500)
			Project Expo Contest	National Level Technical Symposium ELEXSIYA '25	II(Rs. 1000)
10	22UIT093	S.Bommuraj	CODE BUSTERS	National Level Technical Symposium ELEXSIYA '25	I(Rs. 2000)
			National Level Technical Symposium MXCEL '25	Kongu College of Engineering	I(Rs. 2500)
			Project Expo Contest	National Level Technical Symposium ELEXSIYA '25	II(Rs. 1000)

STUDENTS PARTICIPATION – TECHNICAL CONTEST

S. No.	Roll Number	Name of the Student	Name of the Programme / Event	Organizing Institution	Prizes Won / Cash
11	22UIT084	N.Seshan	CODE BUSTERS	National Level Technical Symposium ELEXSIYA '25	I(Rs. 2000)
			Project Expo Contest	National Level Technical Symposium ELEXSIYA '25	II(Rs. 1000)
12	22UIT103	M. Sereen Fathima Gani	CoolCode Contest	National Engineering College	I
13	22UIT100	Suriyajayasubisri M	CoolCode Contest	National Engineering College	I
14	22UIT020	A. Darin Vidhu	Paper presentation	Kongu Engineering College	II
15	22UIT038	K. Soundarapandian	Paper presentation	Kongu Engineering College	II
17	22UIT064	S.Santhosh Thangaseelan	CoolCode Contest	National Engineering College	I
18	22UIT062	J.Muthuramkumar	CoolCode Contest	National Engineering College	I
19	23UIT041	Annamalai	Technical event	PSR Engineering College	I
20	23UIT061	Vishwaa T	Paper presentation	SRM Madurai college engineering	II
			Hackathon	Kongu Engineering College	II

STUDENTS PARTICIPATION – TECHNICAL CONTEST

S. No.	Roll Number	Name of the Student	Name of the Programme / Event	Organizing Institution	Prizes Won / Cash
21	23UIT009	Vishal V	Paper presentation	SRM Madurai college engineering	II
22	23UIT014	Naveen Kumar KM	Hackathon	Kongu Engineering College	II(Rs. 1200)
23	23UIT017	Shiva Shree.R	Technical event	National Engineering College	II(Rs. 250)
			Paper presentation	National Engineering College	I
24	23UIT033	Raja Sri Varsha R	Synchrocode	Sethu Institution of Technology	II(Rs. 500)
25	23UIT019	A.Denisha Antony Ramyaa	Synchrocode	Sethu Institution of Technology	II(Rs. 500)
26	23UIT037	V Neha	Technical quiz	National Engineering College	II(Rs. 250)
27	23UIT055	P.Raghul	Code Quest	AAA College of Engineering	I
28	23UIT078	A.R Arjun	Code Quest	AAA College of Engineering	I
29	21UIT034	T B Senthil Kumar	International Conference	St.Xavier's College of Mangament and Technology	Best presentation award
30	21UIT064	V Bhuvan Muthu	International Conference	St.Xavier's College of Mangament and Technology	Best presentation award
31	21UIT061	Muthuram M	International Conference	St.Xavier's College of Mangament and Technology	Best presentation award

STUDENTS PARTICIPATION – NON-TECHNICAL CONTEST

S. No.	Roll Number	Name of the Student	Name of the Programme / Event	Organizing Institution	Prizes Won / Cash
1	22UIT047	Isaac Pradeep Raj KL	Debate (Eng)	Kalasalingam Academy of Research and Education	I(Rs. 1200)
			Debate (Tamil)	Kalasalingam Academy of Research and Education	II(Rs. 800)
2	22UIT097	Balajee S	Debate (Eng)	Kalasalingam Academy of Research and Education	I(Rs. 1200)
			Debate (Tamil)	Kalasalingam Academy of Research and Education	II(Rs. 800)
3	22UIT106	Balaharish alais yogesh N	Debate (Eng)	Kalasalingam Academy of Research and Education	I(Rs. 1200)
			Debate (Tamil)	Kalasalingam Academy of Research and Education	II(Rs. 800)
4	22UIT079	Jeyalakshmi M	Debate (Eng)	Kalasalingam Academy of Research and Education	I(Rs. 1200)
5	22UIT096	Hemadharshini R	MIME	Kalasalingam Academy of Research and Education	I(Rs. 5000)
6	22UIT010	Suvetha C	MIME	Kalasalingam Academy of Research and Education	I(Rs. 5000)
7	22UIT077	Mangalya T	MIME	Kalasalingam Academy of Research and Education	I(Rs. 5000)
8	22UIT055	Rohini V	MIME	Kalasalingam Academy of Research and Education	I(Rs. 5000)
9	22UIT041	Evangelin D	MIME	Kalasalingam Academy of Research and Education	I(Rs. 5000)
			Group Dance	Kalasalingam Academy of Research and Education	II
			Group Dance	Sree Venkateshwara College Arts and science	I
10	22UIT044	Muthu Subhashini V	MIME	Kalasalingam Academy of Research and Education	I(Rs. 5000)
			Group Dance	Kalasalingam Academy of Research and Education	II

STUDENTS PARTICIPATION – NON-TECHNICAL CONTEST

S. No.	Roll Number	Name of the Student	Name of the Programme / Event	Organizing Institution	Prizes Won / Cash
11	22UIT054	Afrin Thayufa S	MIME	Kalasalingam Academy of Research and Education	I(Rs. 5000)
			Drawing	The Artist Talks (online)	International Excellence award
12	22UIT115	Deepasri R	MIME	Kalasalingam Academy of Research and Education	I(Rs. 5000)
13	22UIT032	Vinoth Kanna N.B	Group Dance	GVN Arts and Science College	II
			Group Dance	Solamalai Engineering college	II
14	23UIT050	C.Jeevitha	Table Tennis (Singles)	Chief Minister Trophy	II
			Table Tennis (Doubles)	Chief Minister Trophy	II(Rs. 4000)
			Table Tennis	Tiruvallur College of Engineering	I
15	23UIT052	S.Subhiksha	Dance	Sri Venkateshwara College of Arts and Science	I
			Dance	Kalasalingam Academy of Research and Education	II(Rs. 3000
			Dance	Hindustan College	I(Rs. 1000
16	23UIT037	V.Neha	Badmintion	Anna University Zonal Badmintion Tournament	II
			Badmintion	VHNSS College Badminton Tournament	III
17	23UIT064	M.Anushuya	Volley Ball	Anna University Zonal Level Volley Ball Tournament	II

STUDENTS PARTICIPATION – INTERNATIONAL CERTIFIED COURSES

S.No.	Roll Number	Name of the Student	Name of the Course	Name of the Industry
1	22UIT067	Vishnu Lakshmi G	Java Oracle Certified Foundations Associate.	Oracle
2	22UIT064	S Santhosh Thangaseelan	Java Oracle Certified Foundations Associate.	Oracle
3	22UIT099	T Akshaya	Java Oracle Certified Foundations Associate.	Oracle

PLACEMENT CORNER

S. NO.	Register No	Roll No	Name of the Student	Name of the Company	Role	Package
1	920421205045	21UIT001	Sriathesh S	Centizen Inc	Digital Marketing	3.6 LPA
2	920421205058	21UIT002	Vishnu Deepan P	FIPSAR		
3	920421205054	21UIT003	Vignesh V K	Sanmina	Internship	3.0 LPA
4	920421205050	21UIT004	Suriya Ram S	Sanmina	Internship	3.0 LPA
5	920421205055	21UIT005	Vinodhan	Sanmina	Internship	3.0 LPA
6	920421205044	21UIT007	Sivasakthi S	MRG Enterprises	Data Entry	16500/Month
7	920421205046	21UIT008	Subashini K	Centizen Inc	Digital Marketing	3.6 LPA
8	920421205026	21UIT009	Mathumitha V	MRG Enterprises	Data Entry	16500/Month
9	920421205018	21UIT010	Kalaiselvi K	MRG Enterprises	Data Entry	16500/Month
10	920421205014	21UIT012	Gomathy B	Cognizant	GenC	4.0 LPA
11	920421205036	21UIT013	Ramya Shri K	VPG	Internship	3.0 LPA
12	920421205049	21UIT014	Sudharsana I	Cognizant	GenC	4.0 LPA
				Relevantz	Software Developer	3 – 3.5 LPA
				Hexaware	Graduate Engineer Trainee	4.0 LPA
13	920421205035	21UIT016	Rajesh R M	VPG	Internship	3.0 LPA
14	920421205053	21UIT017	Veerabalagan K	Sanmina	Internship	3.0 LPA
15	920421205009	21UIT018	Charanya D	FACEPREP	Technical Mentor	5.0 LPA

PLACEMENT CORNER

S. NO.	Register No	Roll No	Name of the Student	Name of the Company	Role	Package
16	920421205023	21UIT019	Kaviya S	Hexaware	Graduate Engineer Trainee	4.0 LPA
17	920421205020	21UIT020	Karthika Devi S R	Centizen Inc	Digital Marketing	3.6 LPA
18	920421205052	21UIT021	Tejash Dhakshin S	Kaavian Systems	Internship	₹2,41,000 per annum
19	920421205038	21UIT023	Sandeep Joe A	Kaavian Systems	Internship	₹2,41,000 per annum
20	920421205043	21UIT024	Sivamuthu Narayana Sabariganesh A	Skillmine Technology Consulting Pvt., Ltd	Internship	3.0 LPA
21	920421205041	21UIT025	Shoba Sri M	Centizen Inc	Software Engineer	4 LPA to 8 LPA
22	920421205025	21UIT026	Magasakthi S	Sanmina	Internship	3.0 LPA
23	920421205028	21UIT027	Megha A M	Xmplar Management Solutions.	Software Engineer	4 LPA - 4.50 LPA
24	920421205003	21UIT029	Akila K	Go Live	Internship	2.5 LPA
25	920421205013	21UIT030	Ganesh Kumar M	VPG	Internship	3.0 LPA
26	920421205011	21UIT031	Dharun S	Kaavian Systems	Internship	₹2,41,000 per annum
27	920421205017	21UIT033	Kabilesh K	Centizen Inc	Software Engineer	4 LPA to 8 LPA
28	920421205039	21UIT034	Senthil Kumar T B	Sanmina	Internship	3.0 LPA
29	920421205034	21UIT035	Priyadharshini A	Sanmina	Internship	3.0 LPA
30	920421205056	21UIT036	Visali Manipiriya V	VPG	Internship	3.0 LPA

PLACEMENT CORNER

S. NO.	Register No	Roll No	Name of the Student	Name of the Company	Role	Package
31	920421205030	21UIT037	Nikitha B	Skillmine Technology Consulting Pvt., Ltd	Internship	3.0 LPA
32	920421205027	21UIT038	Meenakshi S	Cognizant	GenC	4.0 LPA
33	920421205059	21UIT040	Vishnu Priya G	Xmplar Management Solutions.	Software Engineer	4 LPA - 4.50 LPA
34	920421205019	21UIT043	Kalpana Charula S	MRG Enterprises	Data Entry	16500/Month
35	920421205021	21UIT044	Kaviya G	Sanmina	Internship	3.0 LPA
36	920421205016	21UIT046	Joe Selva Rakshan P	Skillmine Technology Consulting Pvt., Ltd	Internship	3.0 LPA
37	920421205012	21UIT047	Easkkithai @ Sumathi M	Chella Software	Software Developer	4.5 LPA
38	920421205008	21UIT048	Balaji G S	Xmplar Management Solutions.	Software Engineer	4 LPA - 4.50 LPA
39	920421205057	21UIT049	Vishal M	Sanmina	Internship	3.0 LPA
40	920421205022	21UIT052	Kaviya M	MRG Enterprises	Data Entry	16500/Month
41	920421205005	21UIT053	Aswathi G	Kaavian Systems	Internship	₹2,41,000 per annum
42	920421205024	21UIT054	Kishore M	Kaavian Systems	Internship	₹2,41,000 per annum
43	920421205031	21UIT056	Praveen Kumar M	Kaavian Systems	Internship	₹2,41,000 per annum
44	920421205007	21UIT057	Bala Chibi Hariesh B	Western Digital	Internship	35,000 (Stipend)
45	920421205037	21UIT059	Saamir Gaffur Mohammed Yakub Shah	Kaavian Systems	Internship	₹2,41,000 per annum
46	920421205051	21UIT060	Swatheeswari G	Tringapps	Internship	10000 per Month (Stipend)
47	920421205303	21UIT061	Muthuram M	Kaavian Systems	Internship	₹2,41,000 per annum
48	920421205304	21UIT062	Rooban Reyeash S	VPG	Internship	3.0 LPA
49	920421205305	21UIT065	Saravana Kumar P	Sanmina	Internship	3.0 LPA

THINK !!!

Password Strength Analyzer

```
import java.util.Scanner;
import java.util.HashSet;
import java.util.Set;

public class PasswordStrengthAnalyzer {

    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.println("=== Password Strength Analyzer ===");
        System.out.print("Enter your password: ");
        String password = scanner.nextLine();

        int score = analyzePassword(password);
        printStrength(score);

        scanner.close();
    }

    public static int analyzePassword(String password) {
        int score = 0;

        if (password.length() >= 8) {
            score += 2;
        } else if (password.length() >= 5) {
            score += 1;
        }

        boolean hasUpper = false;
        boolean hasLower = false;
        boolean hasDigit = false;
        boolean hasSpecial = false;
        Set<Character> uniqueChars = new HashSet<>();
```

```
for (char c : password.toCharArray()) {
            if (Character.isUpperCase(c)) hasUpper = true;
            if (Character.isLowerCase(c)) hasLower = true;
            if (Character.isDigit(c)) hasDigit = true;
            if (!Character.isLetterOrDigit(c)) hasSpecial = true;
            uniqueChars.add(c);
        }

        if (hasUpper) score += 2;
        if (hasLower) score += 2;
        if (hasDigit) score += 2;
        if (hasSpecial) score += 2;

        if (uniqueChars.size() == password.length()) {
            score += 2; // No repeating characters
        } else if (uniqueChars.size() >= password.length() * 0.7) {
            score += 1; // Mostly unique
        }

        return score;
    }

    public static void printStrength(int score) {
        System.out.println("\nPassword Strength Result:");

        if (score >= 9) {
            System.out.println("Strength: VERY STRONG ");
        } else if (score >= 7) {
            System.out.println("Strength: STRONG ");
        } else if (score >= 5) {
            System.out.println("Strength: MEDIUM ");
        } else if (score >= 3) {
            System.out.println("Strength: WEAK ");
        } else {
            System.out.println("Strength: VERY WEAK ");
        }
        System.out.println("Score: " + score + "/12");
    }
}
```

Sample Output:

=== Password Strength Analyzer ===
Enter your password: Tech@123

Password Strength Result:
Strength: VERY STRONG
Score: 11/12

Criteria	Points
Password length ≥ 8	+2
Contains uppercase letter	+2
Contains lowercase letter	+2
Contains digit	+2
Contains special character	+2
All characters unique (no repeat)	+2
(Mostly unique ~70%)	+1

DEEPIKA M
22UIT045

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