Nandha Engineering College
Autonomous
ERODE 52.
APPROVED BY AICTE, NEW DELHI.
AFFILIATED TO ANNA UNIVERSITY, CHENNAI.
ACCREDITED BY NAAC A+ GRADE & ACCREDITED BY NBA

DEPARTMENT OF
COMPUTER SCIENCE AND ENGINEERING
(CYBER SECURITY)

PROUDLY PRESENTS
TECHNICAL MAGAZINE'24
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NANDHA ENGINEERING COLLEGE (AUTONOMOUS)

VISION:

- To be an Institute of excellence providing quality Engineering, Technology and Management education to meet the ever changing needs of the society

MISSION:

- To provide quality education to produce ethical and competent professionals with social responsibility.
- To excel in the thrust areas of Engineering, Technology and Entrepreneurship by solving real world challenges.
- To create a learner centric environment and improve continually to meet the changing global needs.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING [CYBER SECURITY]

VISION:

- To develop a pool of high caliber Professionals, Researchers and Entrepreneurs in computing and cyber security to meet the ever-changing needs of a secured society.

MISSION:

- To provide quality education to produce Computer Science and Cyber Security professionals with social responsibility.
- To excel in the thrust areas of Computing and Cyber Security by solving real-world challenges.
- To create a learner centric environment and improve continually to meet the global secure computing needs.

Dr. U. S. RAGUPATHY
Principal

It gives me immense pleasure to welcome you all to Nandha Engineering College (Autonomous),an eco-friendly campus that strives with a goal to attain excellence by empowering students with sound knowledge, wisdom and experience. Our strength lies in creating pleasant ambience with an excellent infrastructure, qualified and experienced faculty, commitment to personal care, motivation to excel in academic/extracurricular activities and continuous interaction with industry.

Dr. S.PRABHU
Head of the Department

It fills my heart with immense joy to witness the incredible excitement surrounding the upcoming publication of the Cyber Security Departments magazine. This eagerly anticipated magazine will undoubtedly provide aspiring engineers with a vast platform to showcase their technical acumen and express innovative ideas with pen and paper. In this moment of celebration, I extend my heartfelt congratulations to the dedicated faculty, staff, and students who have poured their tireless efforts into bringing this remarkable magazine to fruition. Together, they have crafted a masterpiece that will undoubtedly inspire and leave a lasting impact on all who read it.
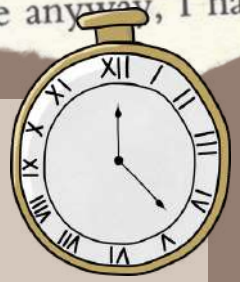
ESSAY

ZERO TRUST SECURITY

Zero Trust Security is a concept that focuses on the principle of **"never trust, always verify"** when it comes to network security. In traditional security models, once someone gains access to the network, they are often given broad access privileges. However, with Zero Trust Security, access is granted on a per-user and per-device basis, regardless of whether the user is inside or outside the network perimeter. Zero Trust Security operates on the belief that no user or device should be automatically trusted, regardless of their location or previous access. It requires continuous verification of user identity, device security posture, and other contextual factors before granting access to resources. This approach helps mitigate the risk of unauthorized access, lateral movement, and data breaches. Implementing Zero Trust Security involves several key components. Firstly, strong authentication mechanisms such as multi-factor authentication are used to verify user identity. Secondly, network segmentation is employed to isolate sensitive data and limit lateral movement within the network. Additionally, continuous monitoring and analysis of user behavior and network traffic are performed to detect any anomalies or suspicious activities. By adopting Zero Trust Security, organizations can enhance their overall security posture. It helps protect against advanced threats, reduces the impact of potential breaches, and provides granular control over access to critical resources. While implementing Zero Trust Security may require careful planning and coordination, the benefits in terms of improved security are well worth it. Remember, it's always important to stay vigilant and adapt to the evolving threat landscape in order to safeguard sensitive data and maintain a secure network environment. Stay safe and secure!

Roshini.T.M
II-Year

Understanding Cyber Forensics
And
Investigating Digital Crimes

Cyber forensics, also known as digital forensics, is a crucial field in the realm of cybersecurity dedicated to investigating digital crimes and gathering evidence to identify perpetrators. In simple terms, cyber forensics involves applying investigative techniques to analyze digital devices, networks, and data to uncover evidence of illegal activities, such as hacking, data breaches, and online fraud. Digital crimes pose significant challenges because they often leave behind electronic traces that require specialized tools and methodologies to uncover. Cyber forensics professionals are tasked with retrieving, preserving, analyzing, and presenting digital evidence in a manner that is admissible in a court of law. The process of cyber forensics typically begins with the identification and preservation of evidence. This involves securing and isolating the digital devices or systems suspected of being involved in the crime to prevent tampering or alteration of data. Once the evidence is secured, forensic investigators use specialized software and techniques to create forensic images or copies of the digital storage devices, ensuring that the original evidence remains intact for analysis. Next, forensic analysts employee various techniques to extract and analyze data from the forensic images. This may involve recovering deleted files, examining system logs, and analyzing network traffic to reconstruct the sequence of events leading up to and following the commission of the crime. Advanced forensic tools and methods, such as data carving and memory analysis, are employed to uncover hidden or encrypted information that may be relevant to the investigation. One of the primary goals of cyber forensics is to establish a chain of custody for the digital evidence, documenting every step of the investigation to ensure its integrity and admissibility in court. This involves maintaining detailed records of how the evidence was collected, analyzed, and preserved, as well as the individuals who had access to it throughout the investigation process.
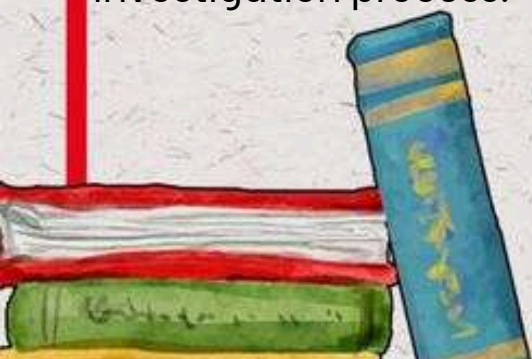
Jeevanantham S
I-Year

FLIPPER ZERO

Flipper Zero is a portable multi-tool for pen testers and geeks in a toy-like body. It loves hacking digital stuff, such as radio protocols, access control systems, hardware, and more. It's fully open-source and customizable, so you can extend it in whatever way you like. Flipper Zero is completely autonomous and can be controlled with a5-buttondirectional pad without additional devices, such as computers or smart phones. Main features are available from the Main Menu. For more control, you can connect to Flipper Zero via USB and Bluetooth. Instead of a TFT, IPS or OLED, we decided to build in a cool old-school LCD.
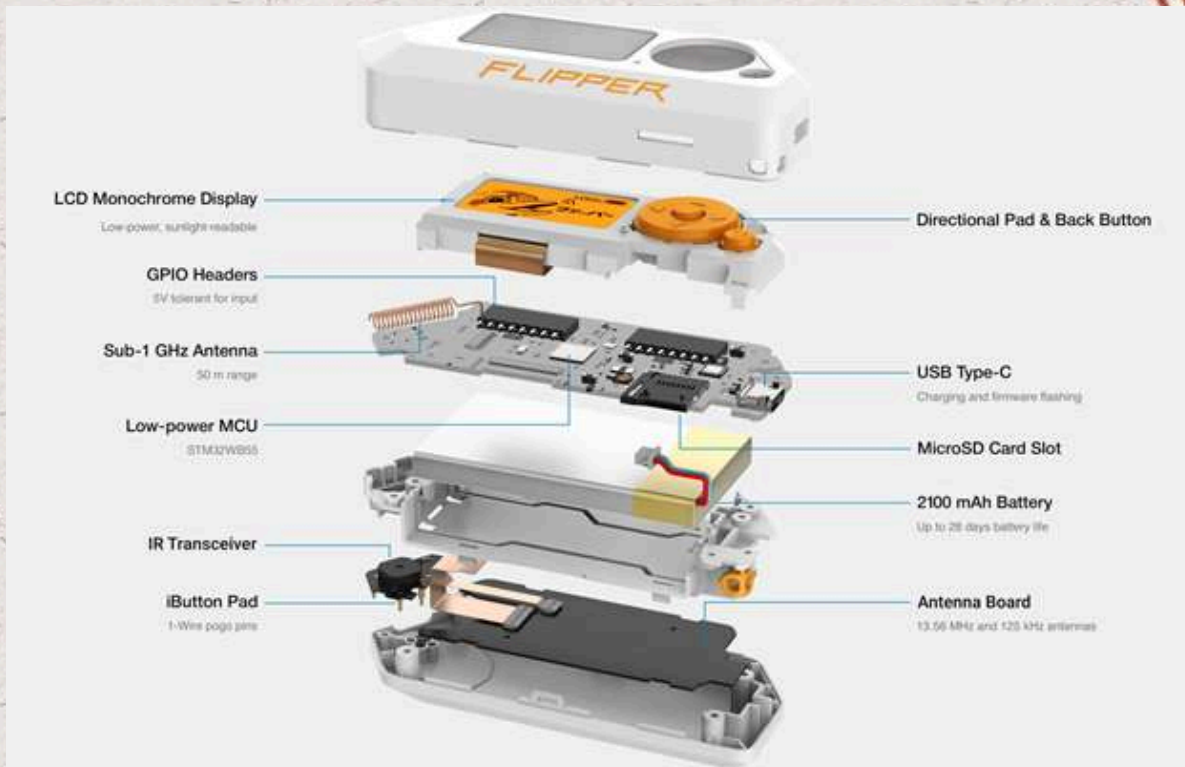
The features that it offers over a wide range of cyber techies that have their eyes on this one is

- Sub-1 GHz Transceiver
- Customizable radio platform
- Low-frequency proximity cards
- NFC
- High-frequency proximity cards z
- Bluetooth
- Infrared Transmitter
- External storage for apps and data
- iButton
- Completely Autonomous
- SPI, UART, I2C to USB converter
- Flashing and debugging tools
- Fuzzing tool.

M.Rahul Aravindh
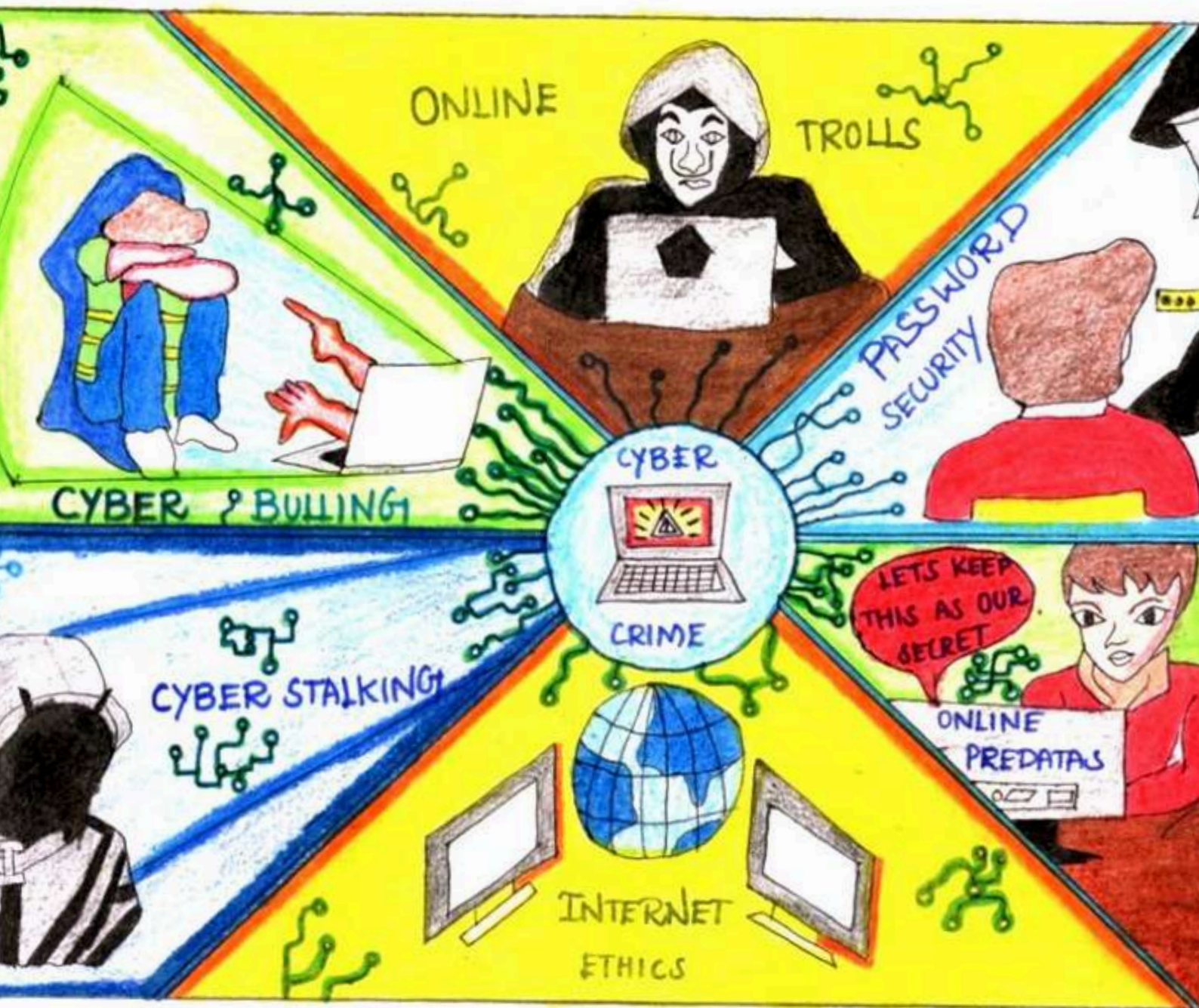**II-Year**

CYBER SECURITY FACTS

- The worldwide information security market is forecast to reach $170.4 billion in 2022.
- 4 million files are stolen every day – that's 44 every single second
- Around 95% of cloud security failures are predicted to be the customer's fault
- The Netherlands has the lowest cyber crime rate, whilst Russia has the highest
- Email is the primary entry point of 94% of malware attacks
- The global average costs of a data breach is $3.9 million across SMEs
- Data Breaches in the United States Cost Twice as Much as the Global Average

ART CONTEST

"Protecting your transactions, safeguarding your peace of mind."

Siranjeev D
I-Year

"Protect your data,
one password at a time"

Kavya Sri.M
II-Year

"If its known, its manageable.
If its well-known,
Its actionable"

V.Hemalathaa
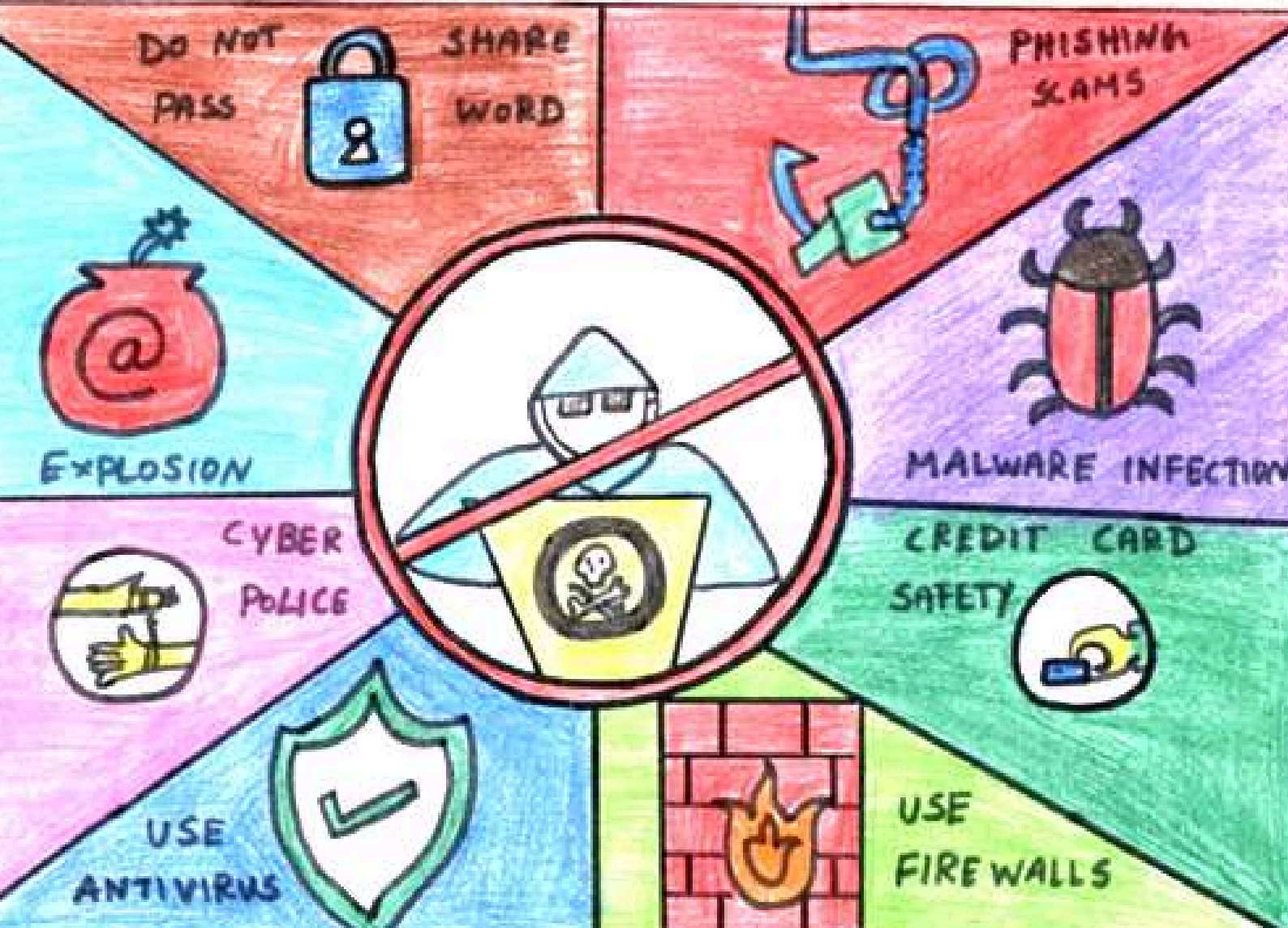II-Year

"Cybersecurity is the practice of protecting internet-connected systems such as hardware, software and data from cyberthreats"

SakthiVel.G
II - year

"Transforming digital risks into secure transactions"

N.J.kaniska
1- year

"In the digital battlefield, our shields are strong safeguarding online payments from threats"

Ragavan.S
I-Year

"Security used to be an inconvenience sometimes, but now
it's a necessity all the time"

G.MONIKA
I-YEAR

"Your password, your first line of defense.
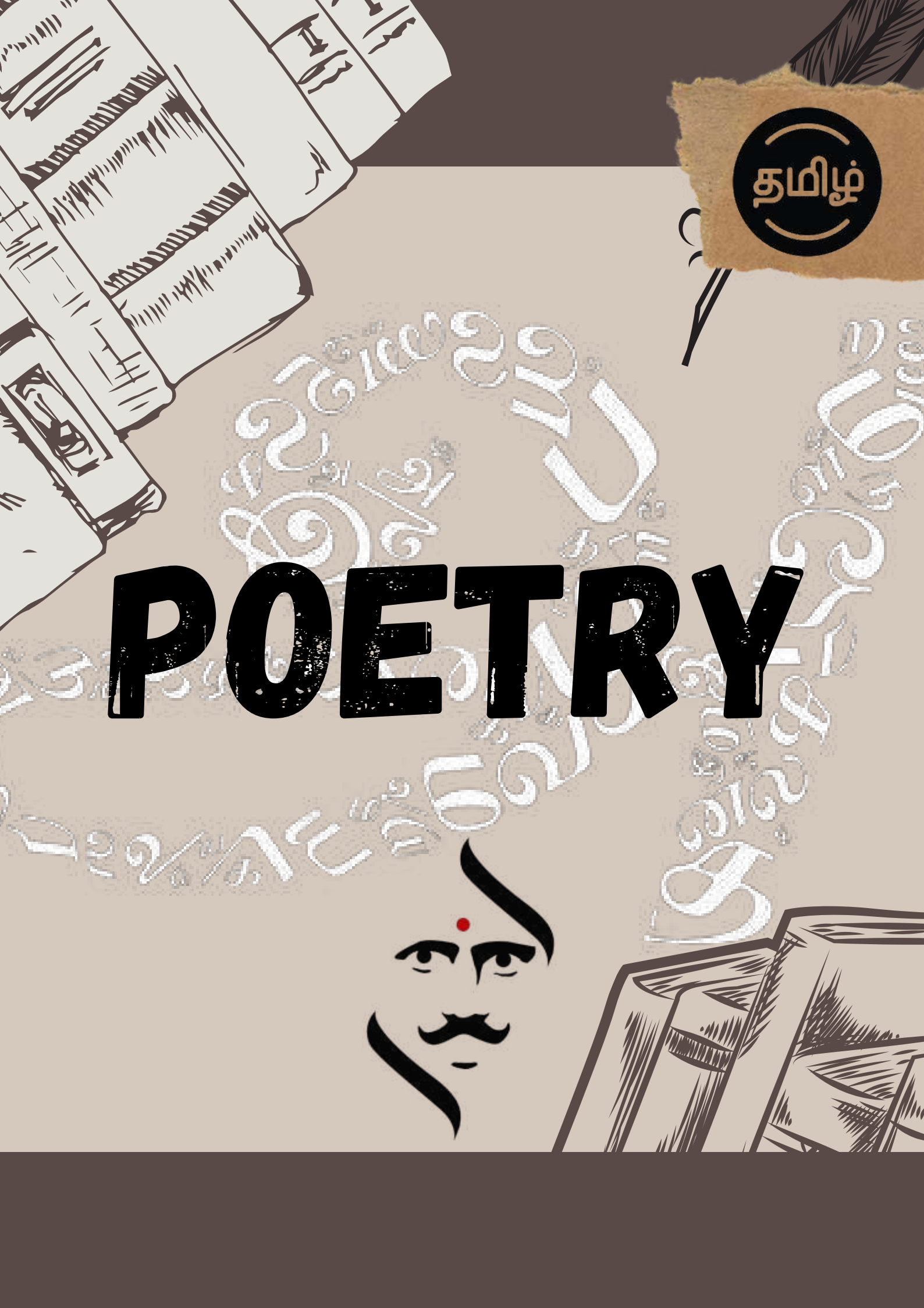Don't let your password be the weakest link"

Vinuprasanth
I- Year

"In the world of online payments, cybersecurity isn't an option – it's a necessity"

Tamilselvi.N.V
II-Year

POETRY

கல்லூரி

இது உனக்கான போதிமரம்!
இது உனக்கான பொழுதுபோக்கு
இடமல்ல!
உனது வருங்கால வாழ்க்கைக்கான பழுது
நீக்கும் இடம்!
இது உன் வாழ்வவில் வெற்றிக்கார் வசந்த
வாசல்!
இங்கே அங்குமிங்கும் அலையசகூடாது
உன் மனது ஊசல்!
இங்கே உன் கற்றலுக்கான இறக்கை
வானம் வசப்பரும்யெனும் இலக்கை
நோக்கி நீ இயங்கினரல் நாளை!
உன்வாழ்க்கையெனும் பூந்தோட்டத்தில்
நீஆடமளம் வெற்றியெனும் ஊஞ்சல்!

கனிஷா.க.சு
முதலாம் ஆண்டு

மஞ்சள்

மங்களத்தின் மறுபெயர் மஞ்சள்!
செம்மண் குழைத்த செறிவான நிலத்தில்
செம்பொன் நிறத்தில் செழிக்கும் மஞ்சள்!
கொத்து கொத்தாய் குலமே தழைக்க
நித்தமும் நாடுவர் குளிர்ந்த மஞ்சளை!
திருமணம் புதுமனை திருவிழா எதிலும்
திருவிளக்கு டன் முதலிடம் வகிக்கும் மஞ்சளே!
தேய்த்தாலும் தேர்வு தன்மை உடையவள்
காய்ந்தாலும் கற்பகத்தரு பெருமை உடையவள்!!
மருந்தாய், உணவாய் மகிமை பெற்றாய்
நறுந்தேன் செய்யும் நலமெல்லாம் நீ செய்தாய்!!
உழைத்த உழவர் உவப்புடன் போற்ற உழவர்
திருநாள் பொங்கல் நன்னாளில்
மஞ்சளே முன் வரிசையிலே தோரணமாய்!!
அரிசியுடன் கலந்து அட்சதை
மணமக்கள் மீது பாசமாய் தூரவ!!!
சிறப்பாய் உலகில் சீர் பெற்று வாழ்வாய்!!!!
இப்பேர்பட்ட மஞ்சளது
எங்கள் ஈரோட்டில் விளைந்ததாம் !!
எங்கள் காவிரி தந்த கொடையாம்!!!!!

இரா. ஜனனிவாசன்
இரண்டாம்ஆண்டு

வேந்தன் வலி

அழுகையோடு பிறந்து...
அழுகையோடு வளர்ந்து...
அழுகையோடு பள்ளிக்கு சென்று
கரும்பலகையில் கண்ணீர் சொட்ட...
அப்பா... அம்மா... என்று கிறுக்க...
நண்பர்களோடு வெயிலில் விளையாடிய...
பள்ளிக்காலம் அழுகையோடு
பிரிந்து புன்னகையில் ஓடியது...
புன்னகையோடு கல்லூரி பூ மலர்ந்தது
கல்விச்சோலையிலே...
பூ வில் காதல் தேன் ஊற்றியிருக்க...
சோலையின் நுனிதொட்ட நான் ...
தேனின் சுவையறியா வேந்தேன்... என
வலி.. வரி வழியால்
வடிக்க முடியாத வலி..
விழி.. வழியால் ..
வடிகிறது.. அழுகை என்ற பெயரோடு!!...

பரணிதரன்.இரா
இரண்டாம்ஆண்டு

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