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Leveraging the Discord Image Logger for Digital Forensics & Device Information Gathering

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ABSTRACT: Our commitment to user security is evident in the significant investments we have made in state-of-the-art infrastructure and technology. We have implemented multi-factor authentication, which requires users to provide multiple forms of identification to access their accounts. This measure greatly reduces the risk of unauthorized access to personal information. To protect sensitive data, we use encryption techniques that make it extremely difficult for hackers to intercept and decipher information transmitted between our platform and users. This ensures that even if there is a breach, the data remains secure and unreadable. We regularly conduct security audits to monitor and improve our security measures. These audits thoroughly evaluate our systems and processes to identify any vulnerabilities or weaknesses, allowing us to proactively address potential threats and maintain the security of our platform.

KEYWORDS: Image detection, Automated logging, Metadata capture, Storage and retrieval, User access control.

I. INTRODUCTION

The primary objective of this initiative is to promote responsible and transparent utilization of image sharing on Discord. The Discord Image Logger software collects extensive data on user interactions with images to encourage accountability and discourage malicious activities. By actively monitoring and recording user interactions, the software allows for a thorough analysis of behaviour and the detection of suspicious activities. Through the promotion of accountability, the initiative aims to create a safer environment for image sharing and foster trust among users.

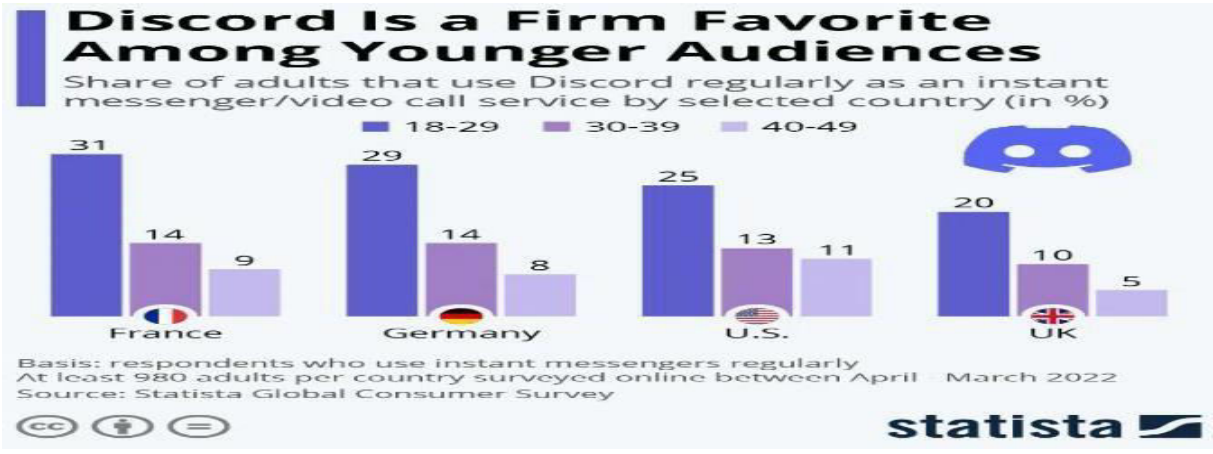

Fig 1 provides a visual representation of the data showcasing the fluctuating popularity of Discord among various age

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The Discord Image Logger software plays a crucial role in preventing and deterring the misuse of image sharing by gathering comprehensive data on user interactions. The initiative strives to build a community that values responsible image sharing. By implementing the Discord Image Logger software, users are prompted to reconsider engaging in harmful or inappropriate behaviour, as their actions are constantly monitored and documented.

In Fig-1 shows Discord's popularity across different age groups in France, Germany, the United States, and the United Kingdom. Among 18-29-year-olds, Discord is most popular, with regular usage rates of 31% in France, 29% in Germany, 25% in the United States, and 20% in the United Kingdom. In the 30-39 age group, 14% in France, 14% in Germany, 8% in the United States, and 10% in the United Kingdom use Discord regularly. However, among 40-49-year-olds, Discord is less popular, with regular usage rates of only 9% in France, 11% in Germany, 13% in the United States, and 5% in the United Kingdom. Overall, Discord is most popular among younger adults, with usage declining as age increases.

II. RELATED WORK

Keyloggers and screen loggers pose a significant threat to user confidentiality due to their ability to operate in user-space and easily distribute and transmit information to remote servers. These malicious programs employ various techniques and can be implemented in multiple ways. Unfortunately, keyloggers and screen loggers are often diverted from their intended purpose and exploited for nefarious activities, particularly compromising the privacy of users and bank customers. This research paper aims to enhance understanding and awareness of these threats by providing a comprehensive overview of keylogger and screen logger attacks. It covers fundamental concepts related to bank information systems and elucidates their functioning. Additionally, the paper presents and discusses a wide range of plausible countermeasures. The keywords associated with this study include Keyloggers, Screen loggers, Virtual keyboards, Optical Character Recognition, Neural networks, SVM, and Noise. Age declining as age increases.

This study introduced Key Catcher, a method to accurately detect user-space key loggers. We analysed the behaviour of a key logger by comparing the input (keystrokes) with the output (I/O patterns). Additionally, we enhanced our model by injecting carefully crafted keystroke patterns and addressed the issue of selecting the optimal input pattern to enhance detection. Our prototype system was successfully tested against popular free key loggers, with no instances of false positives or false negatives. The potential attacks on our detection technique, discussed in detail in Section 5, can be mitigated due to the ease of deploying our method

III. METHODOLOGY

We make sure to prioritize the privacy and security of our users' data by implementing a comprehensive set of measures and following strict data protection protocols. Our commitment to safeguarding your information is unwavering, and we go to great lengths to ensure that your data remains confidential and secure.

To begin with, we can refer fig.2.we adhere to all relevant privacy regulations and laws, both at the national and international levels. This includes compliance with the General Data Protection Regulation (GDPR) and other applicable data protection frameworks. By doing so, we ensure that your data is handled responsibly and in accordance with legal requirements.

We have implemented robust security measures to protect your data from unauthorized access, loss, or misuse. Our systems are equipped with state-of-the-art encryption technologies, firewalls, and intrusion detection systems. These measures help safeguard your information from external threats and ensure that only authorized personnel have access to it.

Furthermore, we have strict access controls in place to limit the number of individuals who can access your data. Our employees undergo thorough background checks and are bound by strict confidentiality agreements. They are trained on data protection best practices and are regularly updated on the latest security protocols.

We also employ secure data storage practices. Your data is stored on servers that are located in highly secure data centres, equipped with physical security measures such as surveillance cameras, access controls, and backup power supplies. Regular backups are performed to ensure that your data is protected against any unforeseen events or system failures.

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In addition to these technical measures, we have implemented internal policies and procedures to ensure that your data is handled responsibly. Our privacy policy clearly outlines how we collect, use, and store your data, and we only retain it for as long as necessary to fulfill the purposes for which it was collected. We can take look at the flow in fig.2.

Overall, our dedication to privacy and security is at the core of everything we do. We continuously monitor and update our systems and practices to stay ahead of emerging threats and ensure that your data remains safe and protected. You can trust us to handle your information responsibly and in accordance with the highest standards of privacy and security.

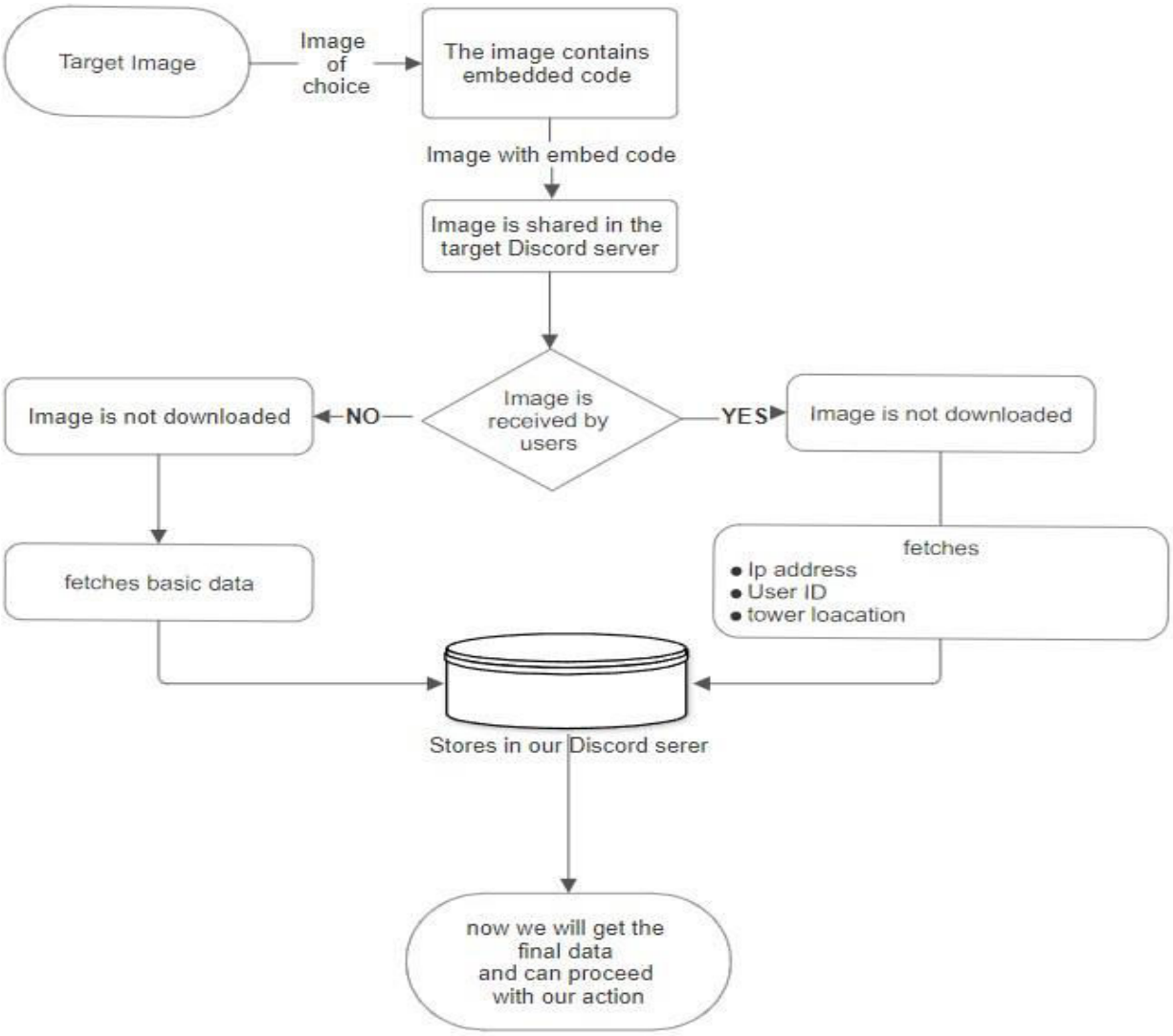

Fig.2. Block Diagram for the entire process

IV. EXPERIMENTAL RESULTS

Our team gathers various types of information, such as IP addresses, TSPs, nations, geographic coordinates, VPNs, bots, operating systems, and web browsers, to gain valuable insights into different aspects of our business. This data allows us to understand the demographics of our users, determine the popularity of our services in different regions, and tailor our marketing efforts accordingly.

Additionally, the data helps us assess the performance of our systems and campaigns, identify patterns and trends, and make data-driven decisions to optimize our strategies. Monitoring this information also helps us ensure the security and integrity of our platforms by differentiating between legitimate and potentially harmful traffic.

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Furthermore, analysing the operating systems and web browsers used by our users helps us optimize our platforms for compatibility and a seamless user experience. Overall, the information we gather plays a crucial role in our decision-making processes, allowing us to make informed decisions, optimize our strategies, and improve our overall performance.

By analysing this diverse range of data points, we are able to gain a comprehensive understanding of our audience and their behaviours. This allows us to tailor our products and services to better meet their needs and preferences, ultimately leading to increased customer satisfaction and loyalty. Additionally, by monitoring IP addresses and detecting potential threats such as bots and VPNs, we are able to enhance the security of our platforms and protect our users' data from malicious activities. Here for reference, we can look at the fig3.

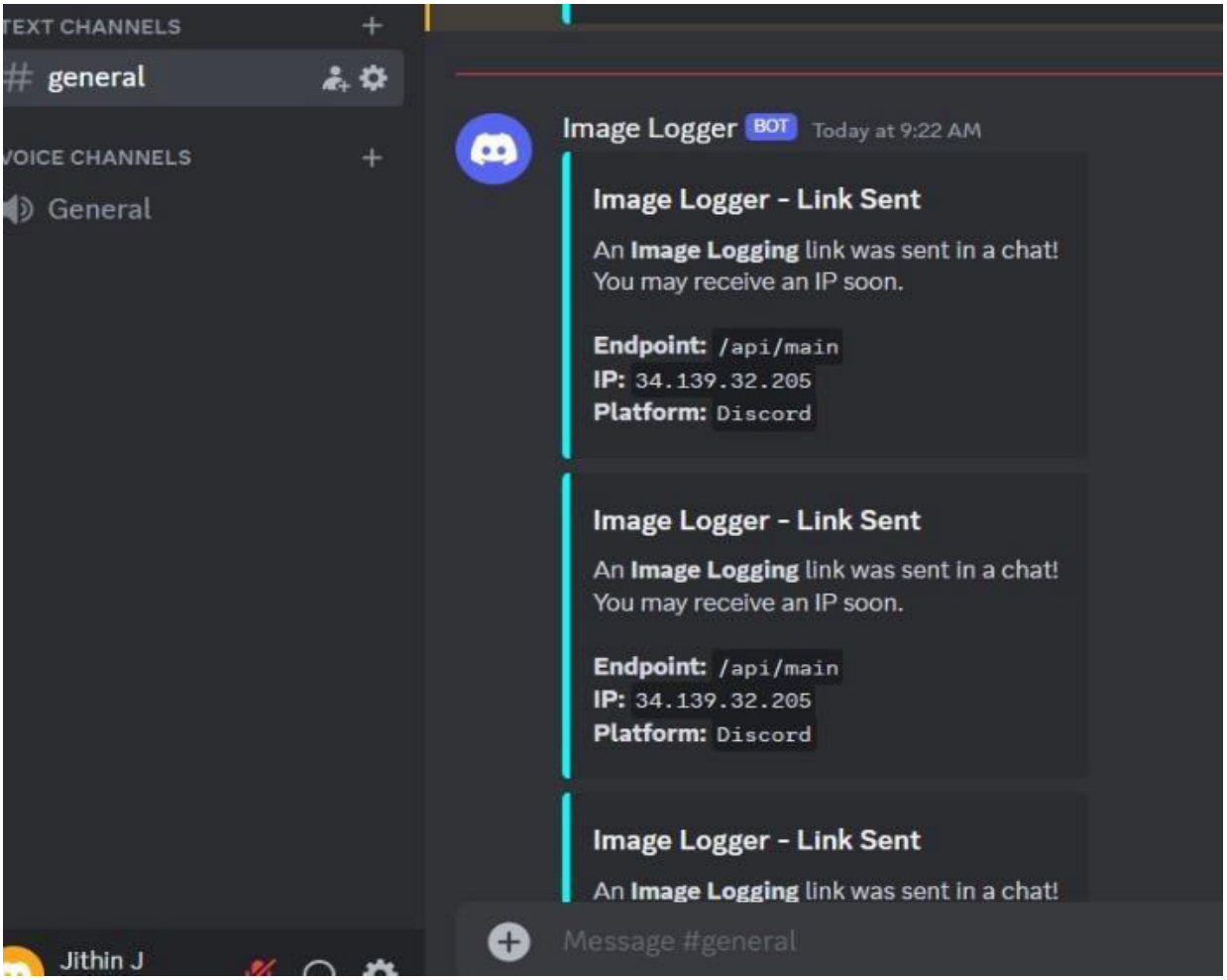

Fig 3 represents the Showing admin access

Furthermore, the insights we gather from this data enable us to stay ahead of market trends and competitors, allowing us to make proactive decisions that keep us competitive in our industry. By continuously monitoring and analysing this information, we are able to adapt and evolve our strategies in real-time, ensuring that we are always delivering the best possible experience to our users.

In conclusion, the data we gather plays a crucial role in every aspect of our business, from marketing and customer service to security and performance optimization. By leveraging this information effectively for reference, we can see the data collected in fig.4., we are able to drive growth, innovation, and success for our organization. For the data the logger collects we can refer table 1.

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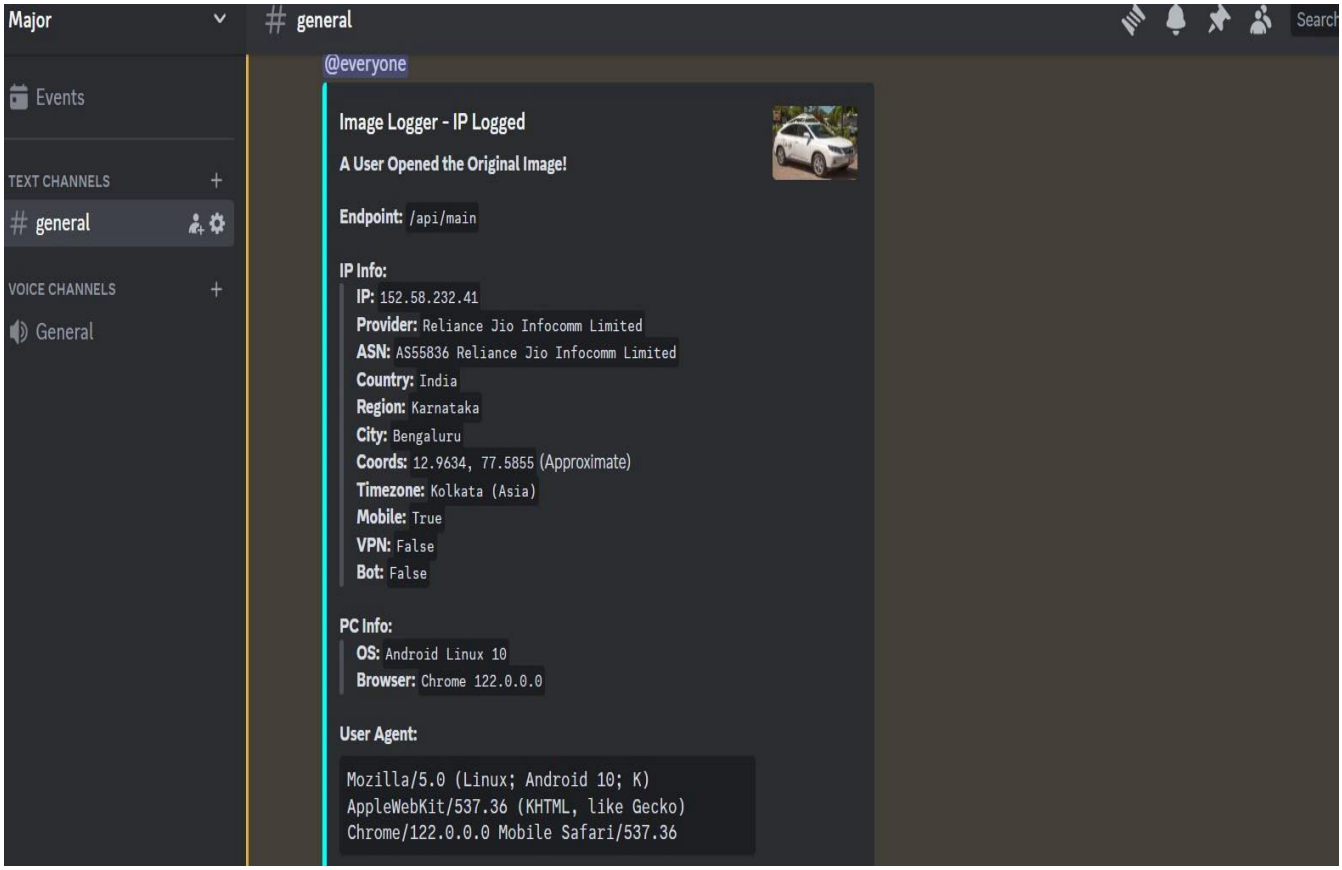

Fig 4 represents the real time data collected

Table I Findings collected from our project.

The information we have gathered.	Information regarding the data we gathered.
IP: 152.58.232.41	IP stands for Internet Protocol, which are the rules that control how data is sent over the internet or local network.
Provider: Reliance Jio Infocom Limited	A telecommunications service provider (TSP) is a communications service provider that typically offers phone and related services.
Coords: 12.9634, 77.5855 (Approximate)	A geographic coordinate system helps locate points on Earth's surface using latitude and longitude values measured in decimal degrees.
VPN: False	A VPN, short for virtual private network, creates a secure connection between your device and a server from a VPN provider. This connection encrypts your data, hides your IP address, and allows you to bypass internet restrictions.
Bot: False	A bot is a type of software that is designed to perform specific tasks. Bots are programmed to run automatically, following their instructions.
OS: Android Linux 10	An operating system (OS) is a program that controls all other application programs in a computer after being loaded by a boot program. The application programs run under the OS.
Browser version	Internet browser edition

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V. CONCLUSION

Despite what some may claim, it is crucial to understand that the current application does not work as a "one click" image logger. This means that it cannot easily and quickly log images with just one click, as some misleading information in the market may suggest. Recently, we have become aware of a scam where dishonest individuals falsely promise to create an image that can be used to gain unauthorized access to your system. This malicious act, known as image Remote Code Execution, involves obtaining your tokens, passwords, and other sensitive information for their own nefarious purposes. It is important to emphasize once again that the current application does not function as a "one click" image logger, despite any misleading claims that may be circulating in the market. It is crucial to be aware of this fact and not fall for any false promises or misleading information. To safeguard your personal information and digital security, it is necessary to exercise extreme caution and vigilance. It is vital to be aware of potential scams and take steps to protect yourself. This includes being cautious about the sources you interact with, avoiding suspicious executable files, and being mindful of the entities you engage in transactions with. It is important to reiterate that the current application does not function as a "one click" image logger, despite any misleading claims that may be circulating in the market. It is crucial to be aware of this fact and not fall for any false promises or misleading information.

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