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MEANS AND METHODS OF ENSURING INFORMATION SECURITY IN THE ELECTRONIC GOVERNMENT SYSTEM

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Abstract: The article discusses the importance of ensuring information security in e-government systems, especially in today's digital era, when these systems are increasingly used. The article discusses the various tools and techniques available to secure an e-government system, including authentication protocols, encryption technologies, firewalls, intrusion detection systems, anti-virus software, vulnerability assessments, and penetration testing.

Key words: Electronic government, digital security, globalization, human factor, public services, information systems, confidential information.

There-government system is an innovative platform designed to provide citizens with quick and convenient access to government services and facilities. It is important to ensure that user information is safe and secure from malicious attacks and unauthorized access. There are several tools and methods to ensure information security in the e-government system. First, strong authentication protocols can be implemented to ensure that only authorized individuals access the system. Second, encryption technologies can be used to ensure that confidential information is protected

and not compromised by hackers or unauthorized individuals. In addition, firewalls, intrusion detection systems, and anti-virus software can be installed to prevent unauthorized access and disclosure of confidential information. In addition, regular vulnerability assessments and penetration tests can be performed to identify potential vulnerabilities and reduce the risk of security breaches. Finally, user education and training can be used to teach users good security practices and prevent user error. In general, the means and methods of ensuring information security in an e-government system are crucial in providing safe and secure public services to citizens. By implementing these measures, the e-government system can operate reliably, effectively and efficiently. In the current digital age, e-government systems are becoming increasingly popular and widespread. These systems provide easy access to various government services and are essential for managing large volumes of sensitive information, including personal, financial and other sensitive information . As the use of these e-government systems increases, the need for robust security measures to protect against cyber-attacks and unauthorized access is more important than ever. There are various means and methods of ensuring information security in the e-government system. One of the main ways is to implement strong authentication protocols. This ensures that only authorized persons with the correct credentials can access the system. Authentication protocols can include a variety of measures, including passwords, two-factor authentication, and biometrics.

Another important aspect of information security is the use of encryption technologies that protect confidential information. Encryption ensures that data is accessible only to authorized personnel and cannot be intercepted or compromised by hackers or other unauthorized persons. Firewalls, intrusion detection systems, and antivirus software can be used to prevent unauthorized access and protect confidential information from malicious attacks. Firewalls act as a barrier between network systems and external networks, while intrusion detection systems monitor network traffic to detect and prevent phishing attempts and unauthorized access.

Having a secure e-government system is critical to maintaining public trust and ensuring the smooth operation of government services. By incorporating the tools and techniques outlined above, government agencies can improve the security of their electronic systems, reduce risks, and protect sensitive information. As the use of e-government systems continues to grow, it is important to invest in robust security protocols to prevent cyber attacks and protect sensitive information.

Summary. In conclusion, the importance of having a robust and secure e-government system cannot be overstated, especially in today's digital age. As the use of e-government systems increases, it is imperative that government agencies invest in strong security measures to protect sensitive information and prevent cyber-attacks. Implementing authentication protocols, encryption technologies, firewalls, intrusion detection systems, anti-virus software, vulnerability assessments, and penetration testing is one way to improve the security of government agencies' electronic systems and maintain public trust. By prioritizing information security, government agencies can ensure the uninterrupted operation of their services and protect the interests of citizens.

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IMAGE PRE-PROCESSING TECHNIQUES FOR CROP PEST DETECTION

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Abstract: Pest detection systems are important tools for crop yields. Because they serve as robust techniques while preventing some damages there. In this paper, some image pre-processing techniques are discussed and efficient methods are described.

Key words: Image processing, crops, pest management, detection, damage, technologies, images.

Image processing plays a crucial role in crop pest detection due to the following reasons:

- *Early detection*: Image processing enables early detection of crop pests, which is crucial for effective pest management. By analyzing images of crops, it becomes possible to identify signs of pest infestation at an early stage, allowing farmers to take appropriate actions to mitigate the damage caused by pests.
- *Accuracy and efficiency*: Image processing algorithms can accurately and efficiently analyze large amounts of crop images, identifying pests with high precision. This helps in minimizing manual efforts and errors associated with traditional pest detection methods, which are often labor-intensive and time-consuming.
- *Non-destructive approach*: In traditional pest detection methods, physical sampling and inspection of crops may lead to damage, which negatively impacts the productivity of crops. Image processing, on the other hand, provides a non-destructive approach to pest detection. It allows farmers to assess the health of crops without physically touching or harming them, thereby preserving their productivity and minimizing any potential damage.
- *Remote sensing capabilities*: Image processing enables the use of remote sensing technologies, such as satellites or drones, to capture images of large