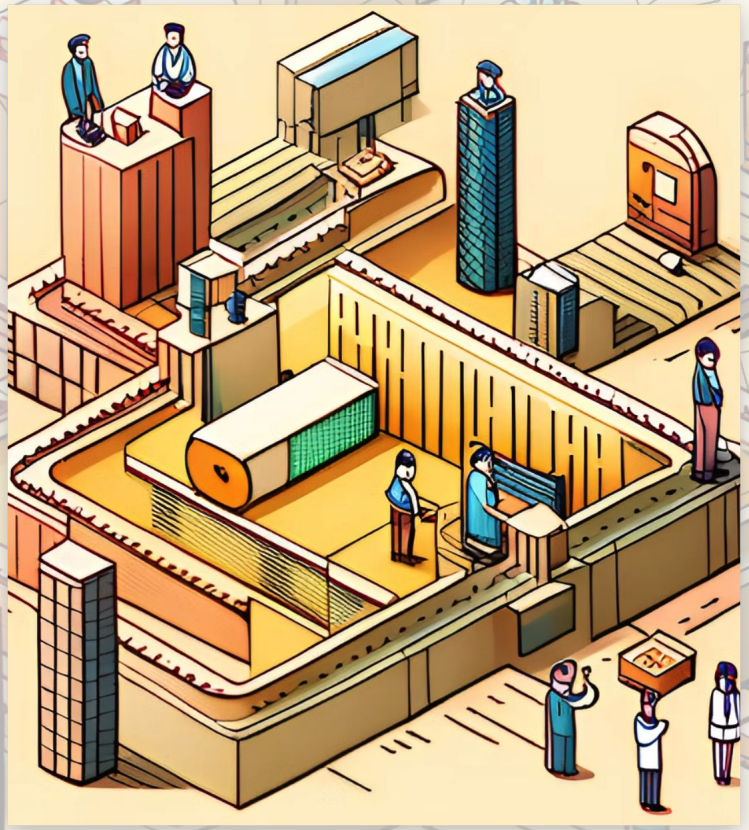

TESTING OF RSA 2048 ENCRYPTION/ DECRYPTION IN MICROPYTHON

A secure method for protecting sensitive data

MEET THE TEAM

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PYTHON, JAVA, R, C#

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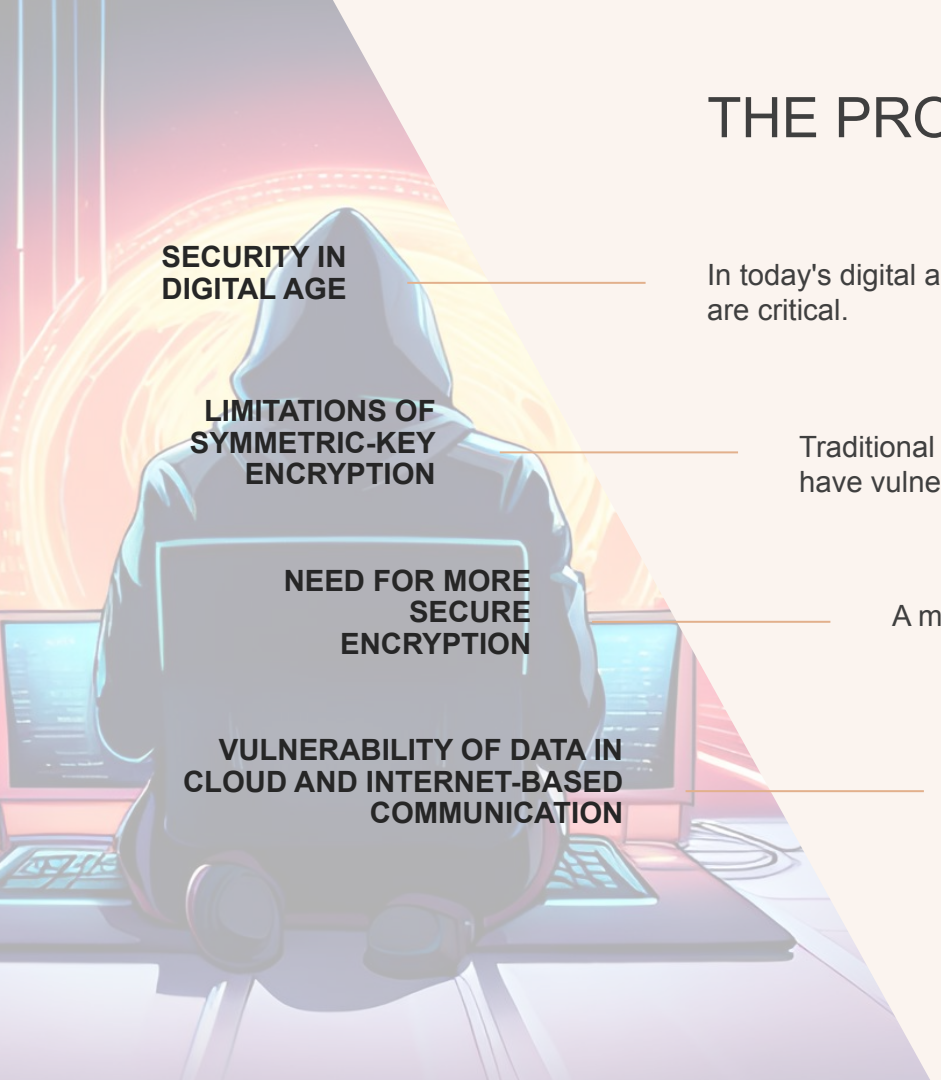
C# .NET, PYTHON, JAVA

THE PROBLEM



SECURITY IN DIGITAL AGE

In today's digital age, secure communication and data protection are critical.

LIMITATIONS OF SYMMETRIC-KEY ENCRYPTION

Traditional encryption methods like symmetric-key encryption have vulnerabilities and may not be reliable.

NEED FOR MORE SECURE ENCRYPTION

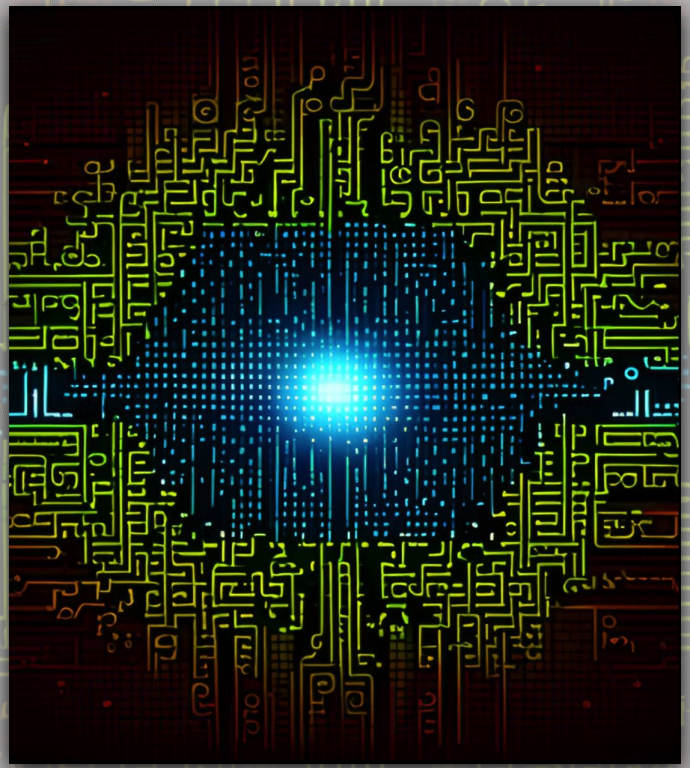
A more secure and reliable encryption method is needed.

VULNERABILITY OF DATA IN CLOUD AND INTERNET-BASED COMMUNICATION

The increasing use of cloud services and internet-based communication has made data vulnerable to interception and unauthorized access.

SOLUTIONS

- Secure Data Transmission
- RSA Encryption in Action
- Digital Signatures with RSA
- Ensuring Data Privacy



RSA 2048 ALGORITHM

- RSA is a encryption algorithm used for secured communications.

- There are two keys

- The length of the key determines the level of security.

RSA IMPLEMENTATION

- The implementation consists of three main components: key generation, encryption, and decryption.

- In encryption, the data is encrypted using the public key.

- In decryption, the ciphertext is decrypted using the private key.

DEMO

LESSONS LEARNED

- Importance of secure data transmission
- Memory issues of Pico-W
- Challenges and obstacles
- Continuous improvement

THANK YOU

Project 5-A