Security Algorithms and Protocols

Project: MileStone

REPO

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Abstract :

The project Repo is an Android Application with encryption system used to encrypt any text inside a file. Repo is File sharing App, which allows to share the files from one's own system to application in an encrypted format.The Content of shared files are encrypted using RSA algorithm. This generates a cipher, upon which the data in the chosen file is encrypted using RSA algorithm, which provides security to the user to store the data without thinking about any intrusion.

Introduction :

We are in a world where information is everything and privacy is a myth. Sharing any data on internet, just as it is without any additional security measures might lead to a privacy breach. So using an encryption standard to protect the data from a third person is very much necessary. RSA is an perfect way to protect the data from unauthorised access. The RSA is hugely popular as its advantage speak for themselves, For instance this encryption standard is freely usable, incurs no licence fees and is not subject to patent restrictions. Added to this come relatively low storage and hardware requirements. The encryption algorithm is uncomplicated and elegant in programming, and is simple to implement.

BackGround :

 The Repo Application lets the user encrypt the data in a file, others can only view the encrypted contents of the files shared.

Experiments :

1) Text encryption java file - which encrypts the contents of the file in the local system.

2) Android Studio - Created File sharing Android Application

Step covered till now - Home Page, Logo, Login Page, SignUp Page

Welcome   page.

Conclusion :

This application provides security for the files which are shared by using RSA Algorithm with authentication.

Requirements :

- Android Studio
- Eclipse IDE JAVA

References :

https://stackoverflow.com/questions/6077507/java-rsa-encryption

https://www.udemy.com/complete-android-developer-course/

https://www.geeksforgeeks.org/rsa-algorithm-cryptography/

https://developer.android.com/guide/index.html