

# **ABSTRACT**

“Crypt” is a JAVA based program which helps user to protect their data by encrypting the file. It can be mainly used when it is needed to be transferred from one user to another user in an unsafe connection, where there is high probability of someone listening to the packets to find out about the information's being sent.

## **1. INTRODUCTION**

### **Data Encryption Program**

I plan to develop a Data encryption program for java platform which will provide the user to encrypt data/message. The encrypted data will be in unreadable format. To read the same data user must use the program again and convert into a readable format. Data security is very important these days because of numerous threats a user can face while sending and receiving data. This application could be very useful in such a case, where, even if someone receives the message it will be unreadable to them.

## **2. Detailed System description**

This application will have an easy user interface to handle the files. The user will only be needed to upload one file to encrypt

or decrypt the data. To encrypt a file it will ask for a normal file and to decrypt a file it will be asking for a decoded file.

### **3. REQUIREMENTS**

The requirements for data encryption are increasing day by day. People are finding many ways to decrypt the data's. This program will address some of the problems in data encryption like:

- Addressing security concern and risks
- Application compatibility
- Scalability
- Compliance
- Protection
- Key storage

Tools used to create the program:

- Eclipse(Text editor)
- JVM
- Gradle(for development and compiling)
- Web browser

### **4. LITERATURE REVIEW**

After going through few other projects which I found on internet. I thought it is safer to use a program that does not give a key to user which protects the exposure of the key. This makes the process of encryption and decryption faster than other programs. It will also be much easier to use since user just needs to upload the file into the program.

## 5. USER MANUAL

This is very simple program, user just uploads the file into the program and the program encodes the file. Program then returns an encrypted file to the user. To decrypt the file, the user needs to upload the same file, then the program will decrypt the file and send it to the user.

## 6. CONCLUSION

I plan to develop a java program will encrypt data and will give a key to user. The saved data will be in unreadable format and will be of no use for third party. To decrypt the data user will have to use the same key to decrypt the data only then the unreadable data will become readable.

## 7. REFERENCES/BIBLIOGRAPHY

- <https://stackoverflow.com/>
- <https://en.wikipedia.org/wiki/Cryptography>
- <https://www.tutorialspoint.com/cryptography/>
- [https://en.wikipedia.org/wiki/Data\\_Encryption\\_Standard](https://en.wikipedia.org/wiki/Data_Encryption_Standard)
- <http://www.code2learn.com/2011/06/encryption-and-decryption-of-data-using.html>
- <https://docs.oracle.com/javase/8/docs/technotes/guides/security/crypto/CryptoSpec.html>