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

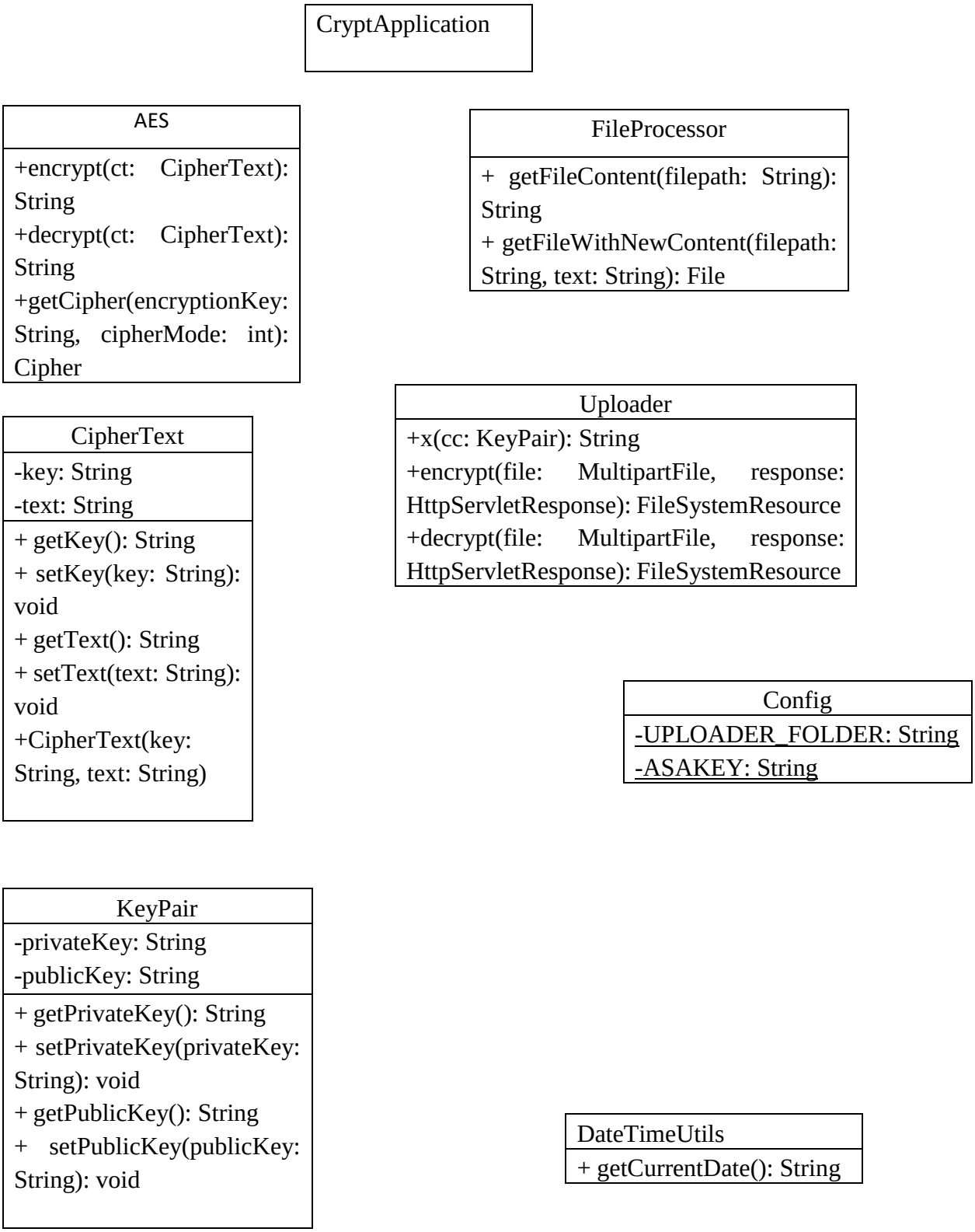
Data Encryption Program

I developed 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 the 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. This program can encrypt and decrypt any text files which can be read with standard text editors (like .txt, .java, .xml files) which does not contain different types of specified in the program. The program will be installed in sender and receiver computer and same key will be used in both during the installation.

Rajeshwor Madhab Shrestha
CW ID: 20082572



Rajeshwor Madhab Shrestha
CW ID: 20082572

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)
- Spring
- JVM
- Gradle(for development and compiling)
- Web browser

Hardware requirements:

	Minimum	Recommended
• Java version	1.4.0	5.0 or greater
• Memory	512 MB	1 GB or more
• Free disk space	300 MB	1 GB or more
• Processor speed	800 Mhz	1.5 Ghz or faster

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

Rajeshwor Madhab Shrestha
CW ID: 20082572

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. The key will be set same in both sender and receiver system, this will decrease the problem of misplacing the key in the system or its leakage to third party.

5. USER MANUAL

This is very simple program, user just uploads the file into the program and the program encodes the file and saves it into a folder. A folder will be created each time user encrypts or decrypts a file and will be named after the time of execution of program. The encrypted files will always be stored in the folder named after the time of upload. The program will also return a copy of encrypted file directly to the user in the browser if it is in any extension other than .txt. To decrypt the file, the user needs to upload the encrypted file, then the program will decrypt the file and save it into another folder which will be saved under the date and time of upload or select the file which was downloaded by the browser. But, before all of that user will need to open the environment on which the program will run. For that user will have to run the CryptApplication java file which acts as back end of the program, then the user will have to open the HTML file which acts as the front end of the program.

6. CONCLUSION

I developed a java program that encrypts the data and will give encrypted file to the user. The saved data will be in unreadable formant and will be of no use for third party. To decrypt the data user

will have to use the same key which is stored within the program to decrypt the data only then the unreadable data will become readable. Same key should be set in the program in both encrypting and decrypting end.

7. REFERENCES/BIBLIOGRAPHY

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