

iTochcrypt



Encryption is a process for the protection of data by means of an encryption associated with a key so that the information is not visible, this with the aim of protecting the information of third parties that are not authorized to visualize, for this a symmetric algorithm is used of encryption called Hill Cipher (HC). The HC algorithm was perfectly adapted to the solution of the problem that already uses with a square matrix to encrypt the channels of the pixel of an image or the characters of a text. This is applied to an instant messaging application, thus preventing third parties from understanding the message.

Objective:

- Create a mobile application, similar like whatsapp and telegram free to install for anyone

- Apply the cryptography algorithm Hill Cipher to all images and texts
- All messages and pictures will be visible but will be incompressible until the user input the correct phrase
- Create an easy to mount server using open source tools like mysql, python, linux, etc.

Installation

You will need python, pypi and mysql.

Install the dependencies in the server, we are going to use virtualenv and python pip PyPi.

```
$ git clone https://github.com/mroctavious/iTochcrypt.git
$ cd iTochcrypt
$ chmod 755 install.sh
$ ./install.sh
```

Admin

There is a tool called, [adminCLI.py](#). You need to run it, there you will find an interactive interface where you can add, delete, users, view all the messages sent, change user keys and even see what messages they have sent.

```
$ cd iTochcrypt
$ chmod 755 adminCLI.py
```

```
$ ./adminCLI.py
```

Development

Want to contribute? That would be great!

Right now, it is a school project but I think it's a great idea, that's why I want to keep working on it in my free time. You are welcome to join :D.

Free Software, Hell Yeah!

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Viva Mexico!