📖 **Home.md**
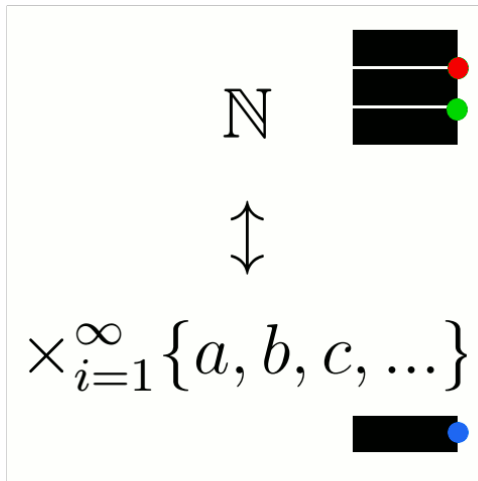

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Cryptograph is the name for a messenger-application which we (the author team) intended to build for testing some Cryptographic algorithms. These underlying algorithms were implemented by us. Whereby we must mention, that they are based on some Mathematical textbooks (we took the Definitions of RSA, etc. from there).

Using **Python (3)** our Application can be build on different platforms (here: Operation Systems) such as **Linux**, **Windows**, **macOS**.

modules

The following imported modules were of core interest:

- Tkinter -Lightweight, multi-platform support
- http.client, http.server - using SimpleHTTPRequestHandler

Download & Build
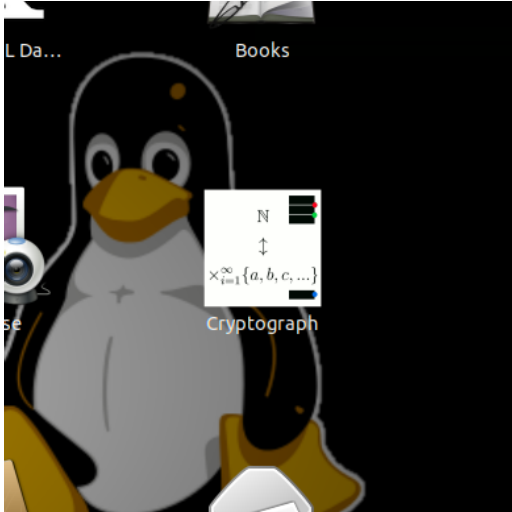
Cryptograph can explicitly be downloaded from Github:

```
git clone https://github.com/stephanb15/Cryptograph.git
```

For building the Cryptograph Application, type the following command in your shell:

Linux (debian)

```
sh BUILD.sh
```
Afterwards you will find an icon like this in your Applications Menue

Non-debian users (at least linux distributions without apt "Advanced Packaging Tool") must install dependencies on their own!

Windows & Mac

There is no build command available, you will have to adapt this on your own, if you like.
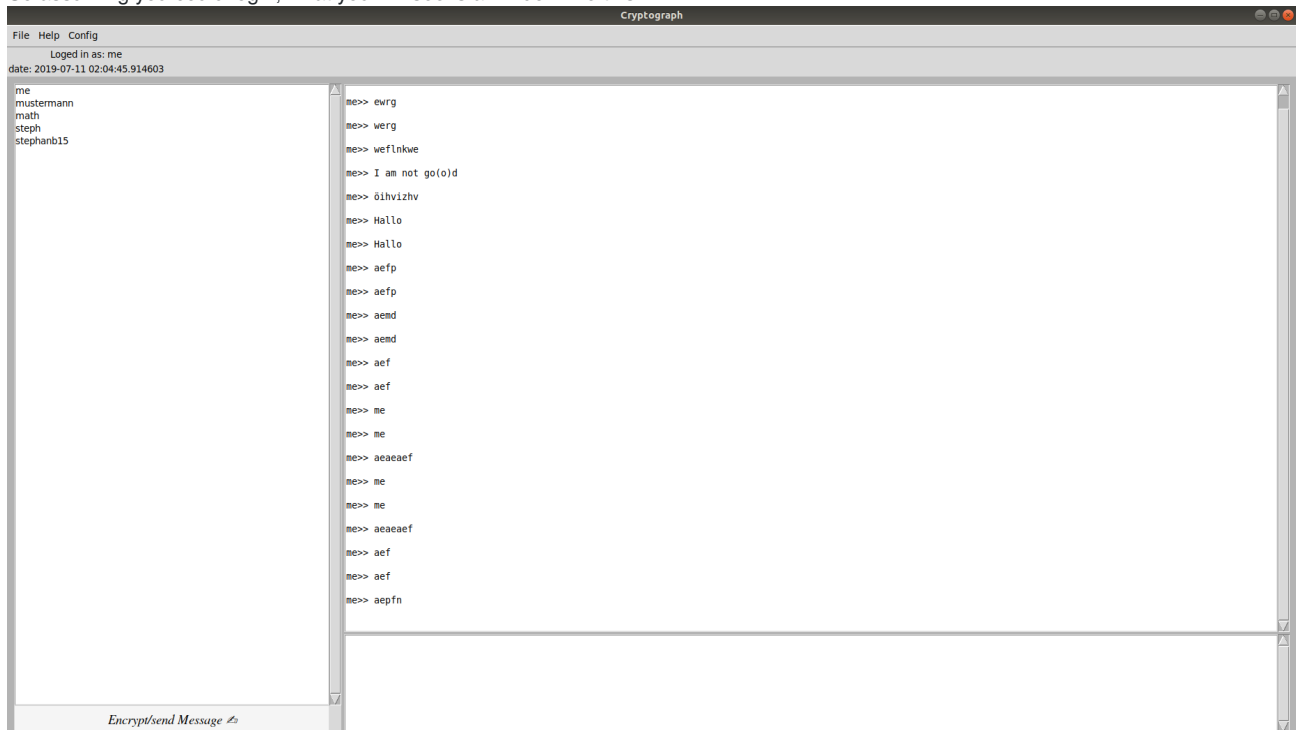Or go in the `Cryptograph` directory and enter;
`python3 cryptograph.py` (as always).

Getting Started

So now (left-) double-click this icon (named Cryptograph).
If you have got problems Logging in, have a look at: GUI.
So assuming you could login, what you will see is a window like this:

1. Click on the top-left Template which lists your User-Name (click on your username).

2. Click on the bottom text-field and start writing on your keyboard after the cursor starts blinking

3. Click (only once, left-mouse key) on the bottom-left button.

If now, not only your message gets printed in the top-right text-field, but after up to 5 seconds the message is automatically reprinted in the text-field, you have successfully communicated with the server