# Coded File DB - Usage Instructions

A program for storing files in a way that preserves confidentiality.

### Introduction

At least Java 1.8 is required to run this program.

To create helper scripts and this manual, run the Jar file. All helper scripts show a message once they finish asking you to press enter before it closes the window.

## Setting Up A Database

- 1. Choose or create a folder to interact with the database in.
- 2. **[OPTIONAL]** Choose or create a folder where the data will be stored (relative paths are allowed and are relative to the folder from step one, Relative Paths Help Page)
- 3. Copy the "init database" script into the folder from step 1.
- 4. Run the copied "init database" script
  - a. In the prompt for "enter storage folder path" either:
    - i. Type "nevermind" to cancel,
    - ii. [RECOMMENDED] Leave it empty or type "default" to use the default storage path,
    - iii. The path to the folder to store protected information from step 2.

- b. In the prompt for "password", enter the database password and then confirm it. [notably, the passwords will not show up as you type, this is a security feature]. THE PASSWORD CANNOT BE RECOVERED IF LOST.
- c. The script has finished, so press enter to close it.

Once init is run, additional helper scripts will be created that allow easy re-opening of the database.

#### What Does Coded File DB Do?

The following are encrypted:

- folder / group names
- list of all folder group names
- the database password

The following may be put in groups:

- images
- text documents
- zip or winrar archives
- any other files
- NO FOLDERS

## Using A Database

To open a database, run the "open" file created in a folder you ran init in and then, when prompted, enter the database password. To pull up the help screen and a list of commands, type "help" and then enter, or for just a list of commands, press enter with the command line empty.

When a group is created or viewed, its data will be temporarily shown in the working directory, the contents of these subfolders will be stored when "save" or "close" is run. **It will not** 

autosave if the window is closed; if this happens, run "open" again, and then save ("\*" will not work here because the program forgets about views between executions).

When a group is created, its name will get coded, but files inside will not be encrypted.

#### SAFE:

```
> enter database password:
> [:: enter command ::]: create
> file group name? [group name or 'nevermind']: alice,bob
create groups ['alice', 'bob']? [Y/n]:
> [:: enter command ::]:
```

Only the names "time0" and "time1" will be visible to an unintended observer. The names "alice" and "bob" will be safely encrypted.

#### NOT SAFE:

```
> enter database password:
> [:: enter command ::]: create
> file group name? [group name or 'nevermind']: time0,time1
create groups ['time0', 'time1']? [Y/n]:
> [:: enter command ::]:
```

Only the names "alice" and "bob" will be visible, "time0" and "time1" will be encrypted away. This does not protect patient information.

# Relative Paths Help Page

Here is an example absolute path:

- Windows: [C:\Users\<username>\Desktop\folder\on\desktop]
- Unix: [~/Desktop/folder/on/desktop]

Here are those same folders relative to [Desktop/folder/]

- Windows: [./on/desktop]
- Unix: [./on/desktop]

The "./" at the start tells the path that it is relative.

[ example relative to Desktop/folder/]

Furthermore, relative paths like "./../another/dir" will resolve to something like "C:\Users\<username>\Desktop\another\dir". This is because "../" tells the path to go up one directory (in the example, going from " $\sim$ /Desktop/folder" to " $\sim$ /Desktop"). "../" may be repeated to go up multiple directories: "../../../some/folder"