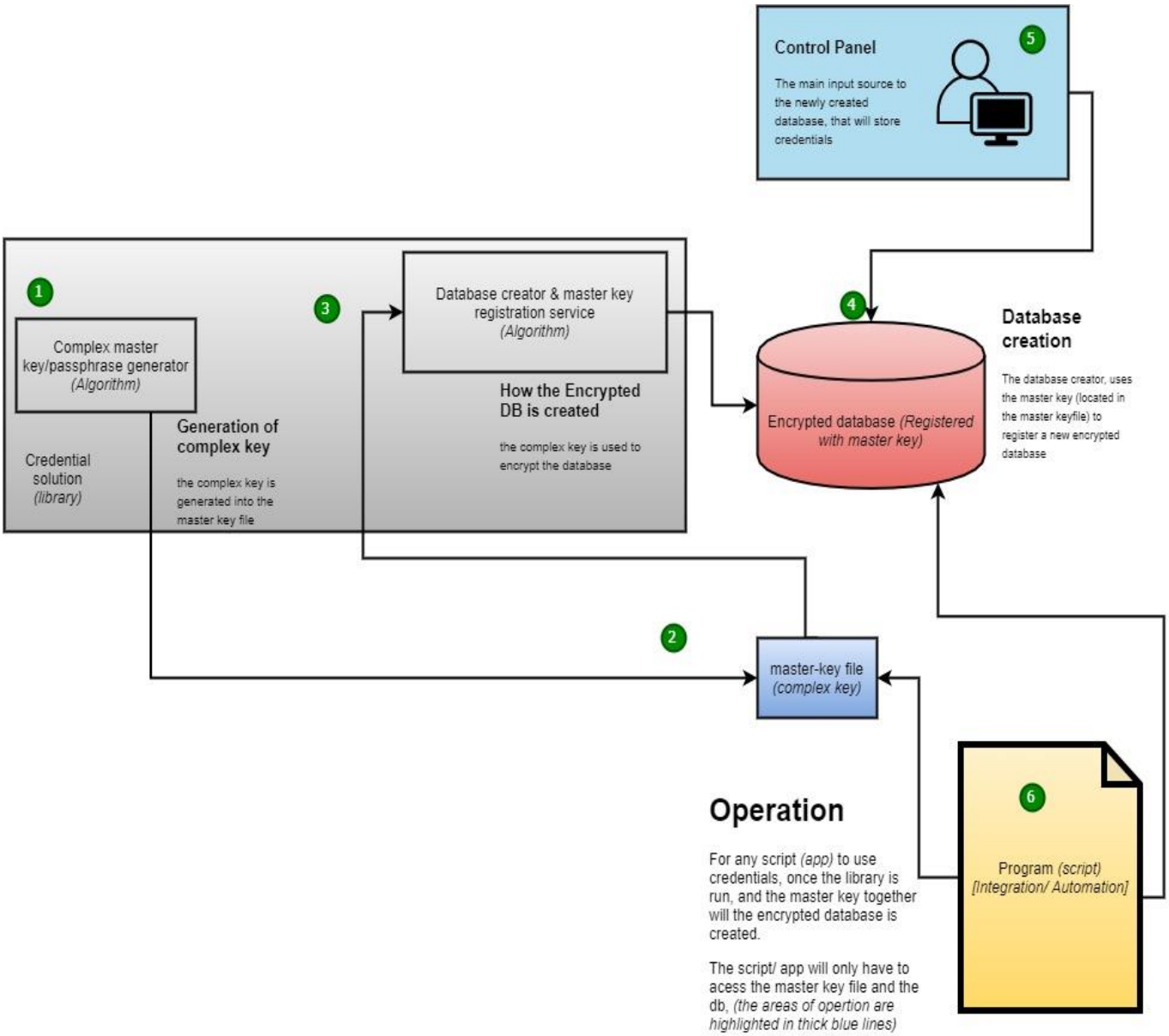
Hud's Password Manager *(CLI)v.1.0*

The Application

Hud's Password Manager for Automations stores the fields below as inputs: Organization, repository, username (required), password (required), database. The fields are defaults and can be change by remapping them in mapper.py. The application bares a cli interface where a given user can input and view stored data. Data (Credentials) are stored in an encrypted database.

How it works (Architecture)

System design:



The application runs on a configuration file, which is the sole controller, this file can be created manually, or *the application can generate it automatically* (recommended) with the necessary parameters, as shown below:

```
#This is the name of the encrypted database
name_of_database          = cape_db.kdb
#the option below is meant to optionally specify the database path
system_path               =

SPECIFY IF KEY/PASSPHRASE

#this option specifies whether the application should use an encryption key
or a passphrase(password)
use_encryption_key        = True

#this is the size of the key if specified above is (use_encryption_key = True)
master_key_size           = 10246

#this is the name of the master key if (use_encryption_key = True)
master_key_file_name      = cape_master-key.key

#this is the name of the master pass if (use_encryption_key = False)
master_pass_file_name     = cape_master-pass.ini
```

NOTE: The directory ".huds_*mngnt_vault"* is a vault which contains a *log file*, the default location of the *encrypted database* and the *key/passphrase* hence, this vault/directory can be optionally specified under *(system_path =),* hence, the default naming is ".huds_mngnt_vault"

STEP 1

To start using this application, one must create a new *.ini file. This means one must, automatically generate the ini file if not available, this can be done by running:

python -B _initialize.py -c .huds_mngnt_vault/cape.ini

```
[root@localhost _CODE_]# python -B _initialize.py -c .huds_mngnt_vault/cape.ini

[+] The specified configuration file does not exist, hence the application will create one ..
    with default settings ...
[root@localhost _CODE_]#
```

STEP 2

ls .huds_mngnt_vault | grep -iE '^cape'*

The above command will help you to view the files initialized.

```
[root@localhost _CODE_]# ls .huds_mngnt_vault | grep -iE '^cape*'
cape_db.kdb
cape.ini
cape_master-key.key
[root@localhost _CODE_]#
```

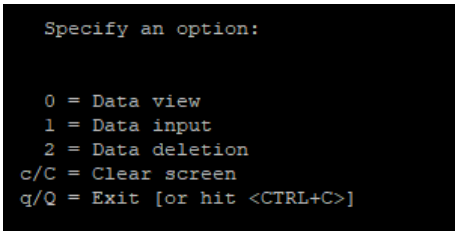
STEP 3

python -B control_panel_.py -c .huds_mngnt_vault/cape.ini

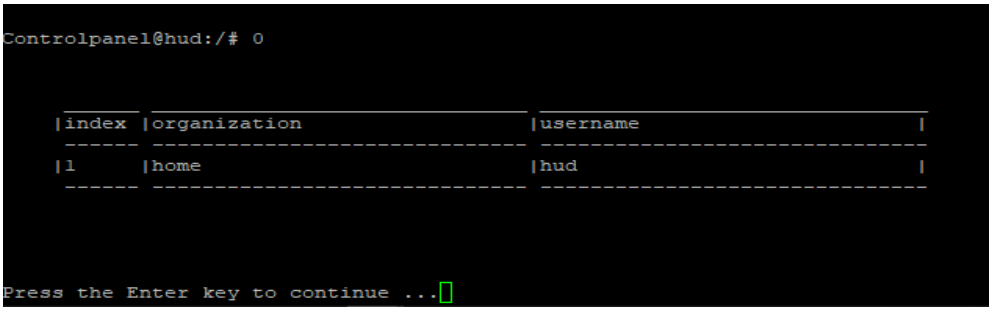
NOTE: *from the above exercise, one can initialize multiple *.ini files which will come with their respective, dbs. and key/passphrases.*
With the specified naming of that *.ini file hence each *.ini files feeds to an encrypted database using a key/passphrase, this means one can save credential data into different databases. so, to log into a particular db one must do step three *(3).* *python -B control_panel_.py -c .huds_mngnt_vault/*.ini*

STEP 4

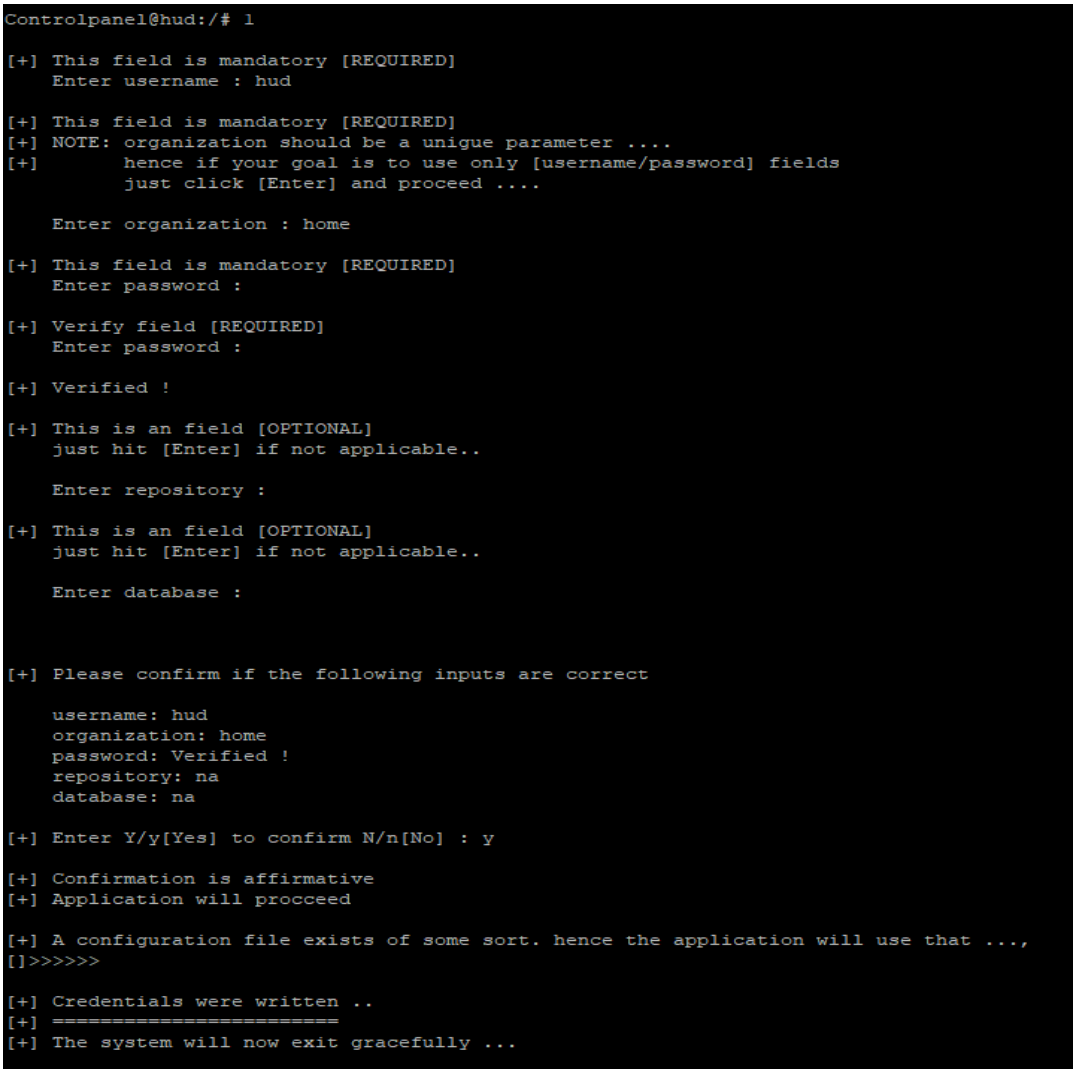
Application Command line interface (CLI)
After login, one can follow the prompt on the cli and perform the following actions. A user can Input, view, and delete stored data (credentials/passwords/keys) that were recorded. *The CLI displays the following options*:



The first option is 0, which is used to signify credentials that have been stored in the DB, the application only displays the usernames and not the passwords, this can be reconfigured later to (not display the usernames too), hence, for simplicity and cleanliness, the application displays the following:



The second option 1, is used to input data (credentials) into the system, these credentials/passwords/API keys, will later be stored in and encrypted database.



The last option is 2, this is to delete, a given credential. A user will have to use the 0 option to view the stored credentials and then, select the one to be deleted, the delete option comes with an input prompt, the user must enter the organization that matched to the credentials. *(we can safely say, the organization field is like the key and hence is a very important field)*