

# Maya The Secret Vault

External Review on 18-March-2022



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# Agenda

- The agenda of this project is to make user free from complexity and paying for the services.

# Abstract

- This project aims at developing a system which will hide the file where the user needs to first setup the master password and after creating the password the users has four operations, it is shown in the screen and can select anyone operation by entering the desired number.
- So this project aims at hiding the file, unhide the file, view the hidden files by thier index storage, delete and reset the vault, encrypt the file using AES encryption and finally exit from the vault if and if user wants to exit.

# Objective

- The objective of our project is to hide the file which are giving by the user and encrypt the file with AES encryption algorithm with of course the users will.

# Introduction

- What is Vault ?
- Why Vault is necessary ?
- Hashicorp Vault is no 1 but why this project?
- What is AES?

# Project Motivation

- The main motivation of this project is to learn the python programming language and to create things easy for the user.

# Existing System and its limitations

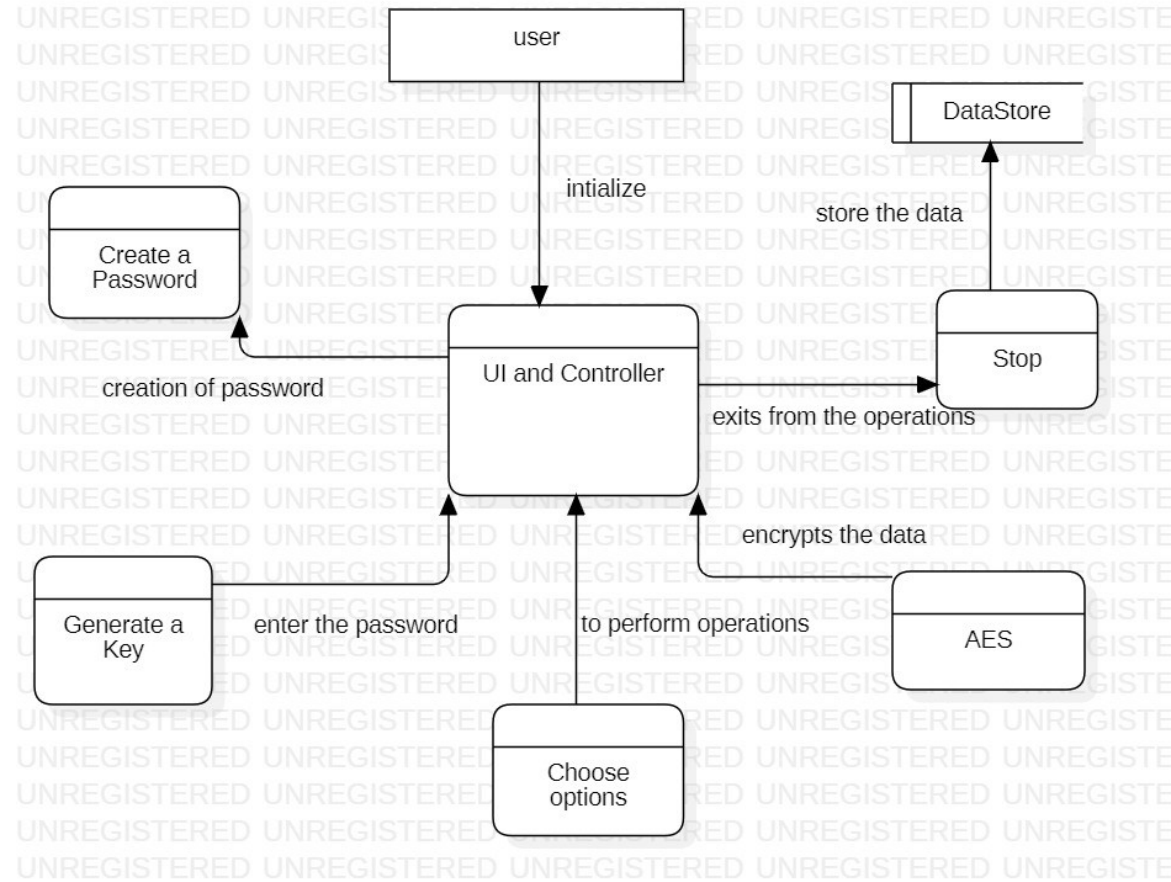
- Hashicorp Vault Cloud Application
- Limitations :
  1. It is very costly. (3.652 \$ per hour)
  2. It is very complex as it is the cloud application where AWS is the there mediator.



# Proposed System and its limitation

- Local Usage of the project.
- Non Registered Users.
- Offline Mode of network.
- The system is mainly focuses on the ease of user point of view where the complexity is being reduced and the encryption is being used is the AES.
- Limitation :
  - 1.It is only for one file at a time.
  - 2.In future, we don't know that community can deprecate the modules.

# Description of proposed work



# Results

**TestCase 8.1:** Initialization.

```
abu@abu-o-techo-linux:~$ secret_vault  
Welcome to the secret vault!!!
```

*TestCase 8.1 : Initialization by the user or root user*

**TestCase 8.2:** Creating the master password

```
abu@abu-o-techo-linux:~$ secret_vault  
Welcome to the secret vault!!!  
Create a Master Password :  
Welcome
```

*TestCase 8.2 : Creating the master password*

**TestCase 8.3:** Hiding the file where the user needs to locate the file address and paste or drag and drop it.

```
abu@abu-o-techo-linux:~$ secret_vault
Welcome to the secret vault!!!
Create a Master Password :
Welcome

Enter 1 to hide a file
Enter 2 to unhide a file
Enter 3 to view hidden files
Enter 4 to Exit
Enter 5 to Reset the vault and delete all of its contents

Enter your choice : 1

Tip : Drag and Drop the file
Enter the path of the file to hide : /home/abu/Desktop/test.txt
Do you want to encrypt the file? (Y or N) : y

Adding file to the vault...

File successfully added to the vault
You can now delete the original file if you want
```

*TestCase 8.3 : Hiding the file*

**TestCase 8.4:** Viewing the hidden files in the terminal for the user specific and it wont be saved in any logs .

```
Enter 1 to hide a file
Enter 2 to unhide a file
Enter 3 to view hidden files
Enter 4 to Exit
Enter 5 to Reset the vault and delete all of its contents

Enter your choice : 3

-----
index   |files
-----
0       |test.txt.aes
-----
```

*TestCase 8.4 : View of the hidden files*

**TestCase 8.5:** Unhide the file/files from the vault and it will be saved in the same directory as the terminal opened for the initialization of the secret\_vault.

```
Enter 1 to hide a file
Enter 2 to unhide a file
Enter 3 to view hidden files
Enter 4 to Exit
Enter 5 to Reset the vault and delete all of its contents

Enter your choice : 2

Enter the index of the file from view hidden files : 0

File unhided successfully
The file will be present in /home/abu
```

*TestCase 8.5 : Unhide the file or files*

### **TestCase 8.6:** Exit from the program

```
Enter 1 to hide a file
Enter 2 to unhide a file
Enter 3 to view hidden files
Enter 4 to Exit
Enter 5 to Reset the vault and delete all of its contents

Enter your choice : 4
```

*TestCase 8.6 : Exit from the program*

**TestCase 8.7:** Deleting and Resetting the vault by user wish and need master password to do this operation which was created by the user.

```
Enter 1 to hide a file
Enter 2 to unhide a file
Enter 3 to view hidden files
Enter 4 to Exit
Enter 5 to Reset the vault and delete all of its contents

Enter your choice : 5

Do you really want to delete and reset the vault?(Y or N) : y

Enter the password to confirm :
Removing and resetting all data...

Reset done. Thank You
```

*TestCase 8.7 : Delete and Reset the files in the vault*



# Results comparison existing and proposed

- HashiCorp Vault

- a) Its a service.
- b) User cant own the service.
- c) Its not open source.
- d) It works on internet
- e) Its Complex to understand.

- Maya The Secret Vault

- a) Its a product.
- b) User can own the product
- c) Its open-source.
- d) It does not need any connection.
- e) Its an easy to interact.

# Conclusion

- This project conclude the system which will hide the file where the user needs to first setup the master password and after creating the password the users has four operations, it is shown in the screen and can select anyone operation by entering the desired number.

# Future Scope

In near future we will be adding the whole folder or multiple files encryption in one go unlike looping the every single file in a multiple process.

# References

- <https://dock2learn.com/tech/how-to-store-your-secrets-in-vault-using-python/>
- <https://www.contino.io/insights/hashicorp-vault>
- <https://github.com/marketplace/actions/vault-secrets>
- <https://www.youtube.com/watch?v=VYfl-DpZ5wM>

Thank You