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# User's Guide

## COD3BR3AKR

**Prepared by** Diverse Engineers

Hood College  
Department of CS & IT  
Frederick Maryland

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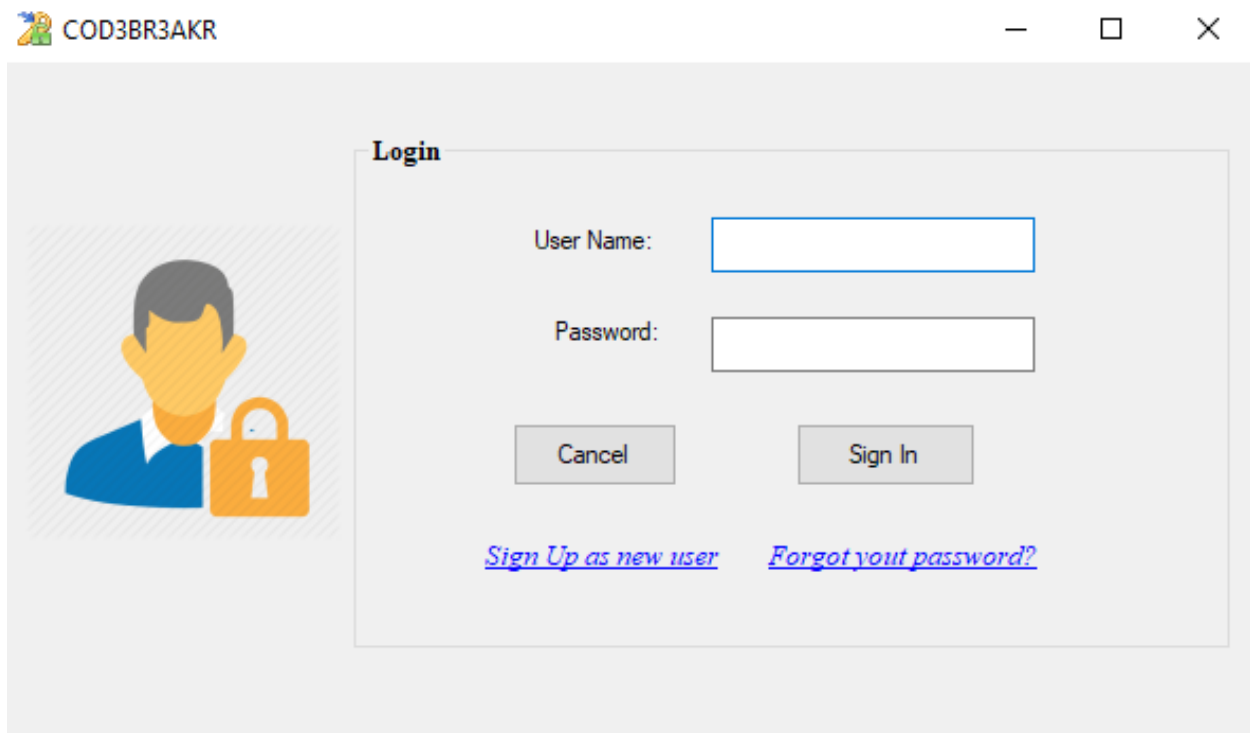
## A. INTRODUCTION

The product named “COD3BR3KR” referred to as “**Code Breaker**” is a stand-alone software encryption-decryption system in which allow a user can either input plaintext data (via string or file input) to be encrypted to ciphertext, or input ciphertext (via string or file input) to be decrypted to plaintext. It can be used as a method to protect user data using cryptographic technologies. The **Code Breaker** is a product that runs on a Windows OS and the main functions of the product are:

1. Provide Authentication mechanisms for logging in to the system
2. Encrypt user data and output the result
3. Decrypt user data and output the result
4. Provide an interface for managing users of the system
5. Provide an interface for viewing logs for user activity and error reporting

## 1 QUICK START GUIDE

### 1.1 AUTHENTICATION



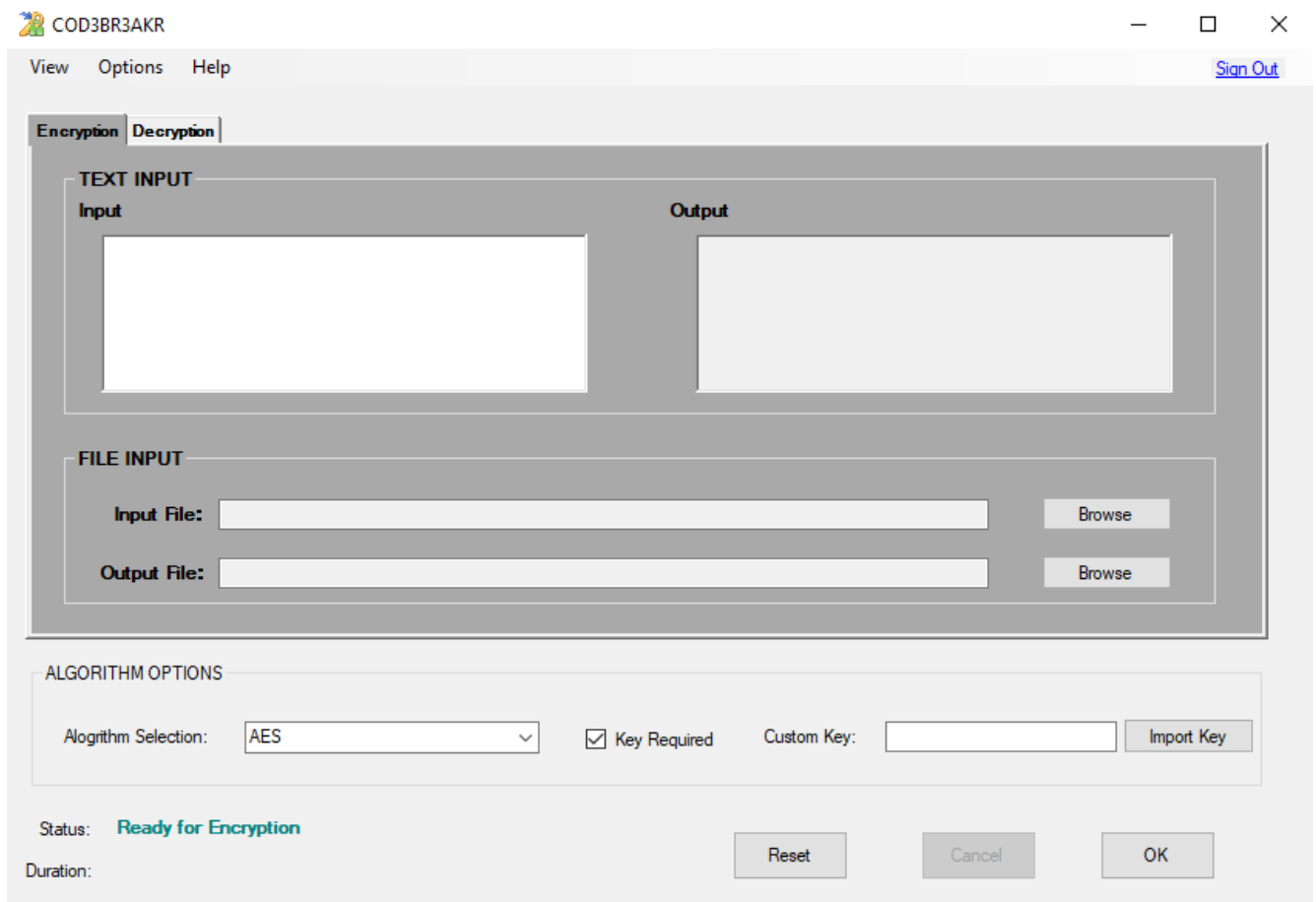
The login screen will be brought up. I will ask you for your authentication in order to access the software. If you already sign up, you can enter your username and password than click sign in. if it is your first time, you should sign up as new users.

The screenshot shows a window titled "COD3BR3AKR - AccountManagement" with standard Windows window controls. Inside, there are three tabs: "User Registration", "User Reset", and "User Management". The "User Registration" tab is active. Below the tabs is a "New User" section. It contains three input fields: "User Name:" with the text "Abdul" and a green "Valid" label to its right; "Password:" with a masked password of six dots; and "Confirm Password:" with a masked password of six dots. At the bottom of this section are two buttons: "Cancel" and "Sign Up".

New users must be sign up. In order to sign up you have to have a valid username and passwords as well it will ask you for password conformation. After that click sign up, a pop up will appear "Registration successfully "than it ask you to login in page again.

The screenshot shows a small "Information" dialog box with a close button (X) in the top right corner. It features a blue circular icon with a white "i" on the left. To the right of the icon, the text reads: "Registration Successful! Please login with new Username and Password." At the bottom right of the dialog box is an "OK" button.

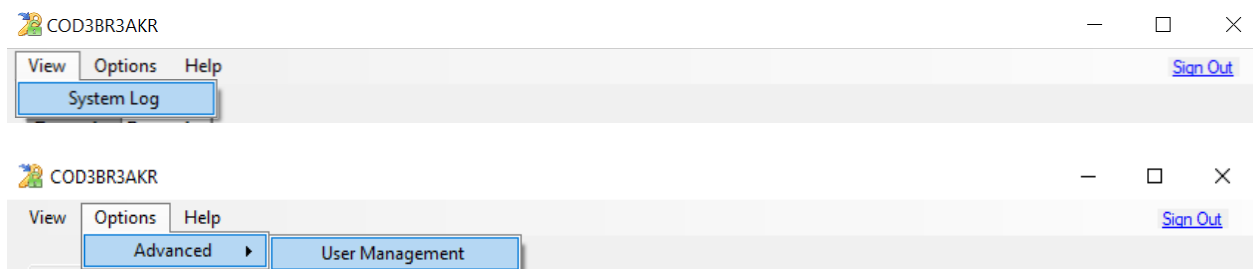
## 1.2 Graphical user interface

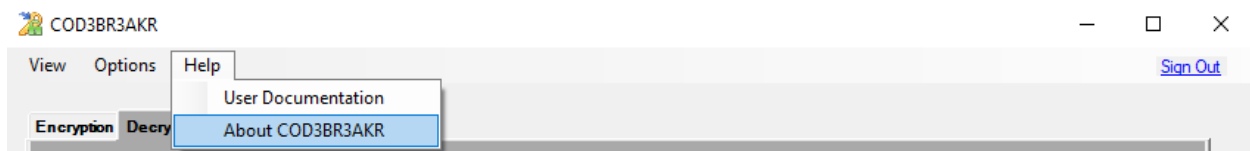


Graphical user interface will have include the following option:

## 1.3 Navigation Bars

The user will navigate to view the logs and users management as well you can access the help to view the users guides and about the COD3BR3KR. Also , you will have the sign out button that will exit you of the software.





## 1.4 Encrypt user data and output the result

You can input plaintext data to be encrypted. Once the input is logged, and algorithms selected user shall be able to click on the OK to process the encryption then output the ciphertext to the user.

Note: here is no limit to character combinations, as long as they fall within the symbol set of US-ASCII and are no more than 300 characters in length.



## 1.5 Decrypt user data and output the result

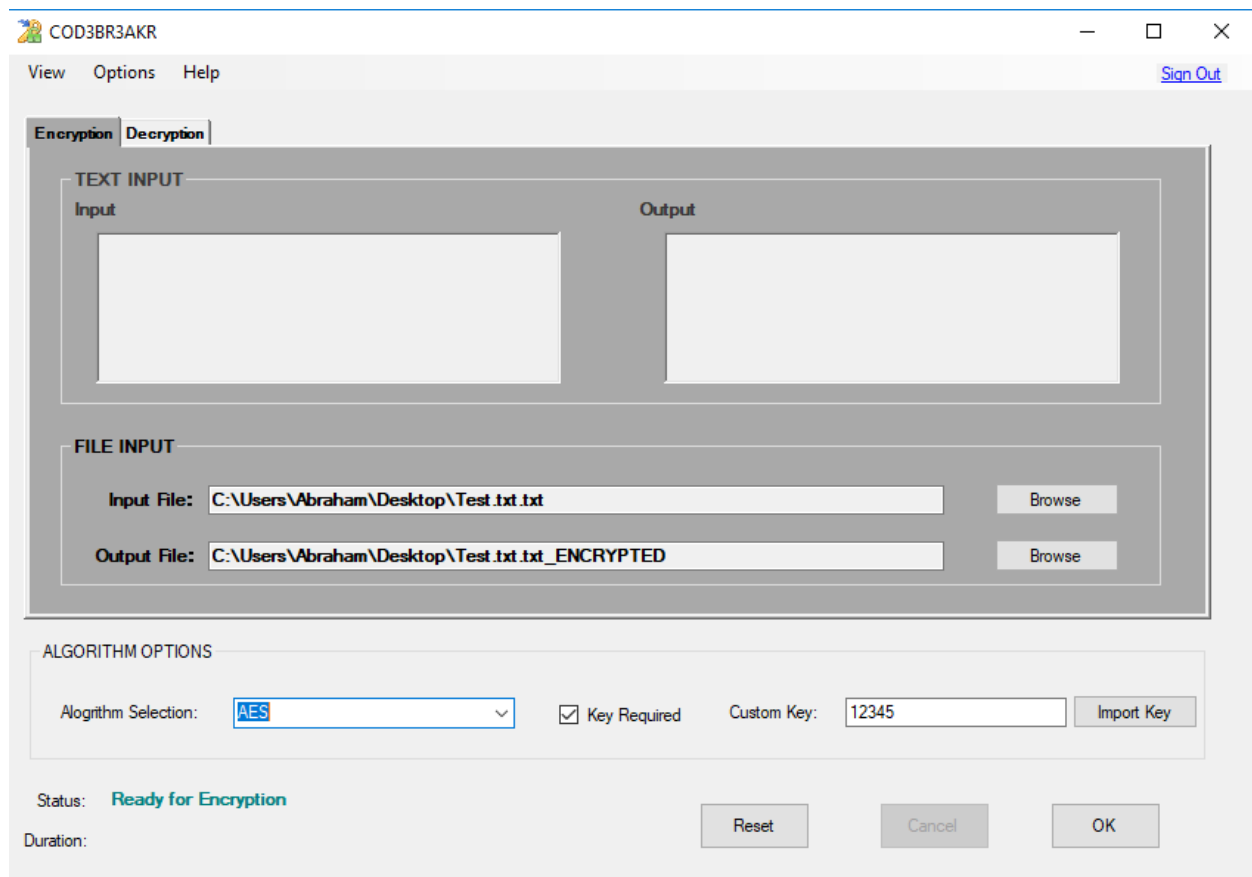
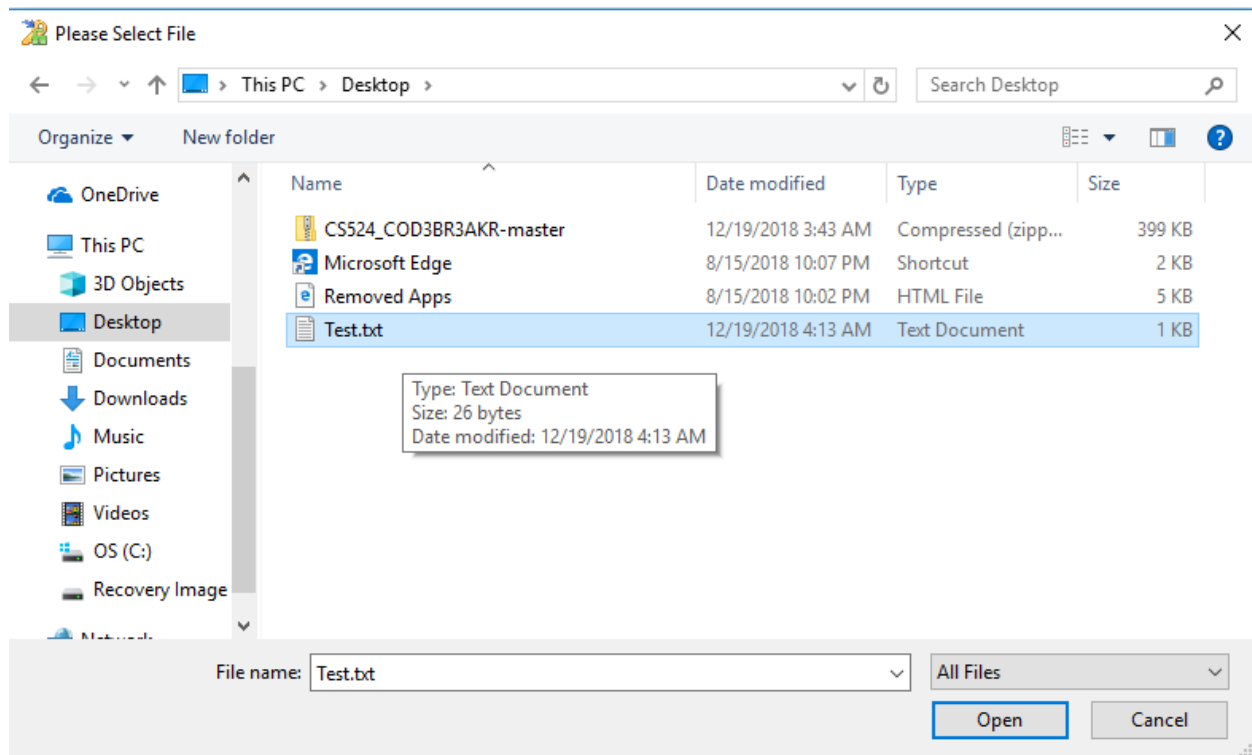
After decryption is performed, you can copy the output and click on the Decryption tap. Than paste the output and select the algorithm, than add the key that's associate with algorithm that you choose than click Ok. Notice that is the button OK is highlighted.

The screenshot shows the COD3BR3AKR application window. The title bar includes the application name and standard window controls. The menu bar has 'View', 'Options', and 'Help'. A 'Sign Out' link is in the top right. The 'Encryption' and 'Decryption' tabs are visible, with 'Decryption' selected. The 'TEXT INPUT' section has an 'Input' field containing a long alphanumeric string and an 'Output' field containing 'Hi Welcome to CS524 \*\*\*\*\*'. The 'FILE INPUT' section has 'Input File' and 'Output File' fields, each with a 'Browse' button. The 'ALGORITHM OPTIONS' section has an 'Algorithm Selection' dropdown set to 'AES', a checked 'Key Required' checkbox, a 'Custom Key' field with '12345', and an 'Import Key' button. The status bar shows 'Status: Decryption completed successfully!' and 'Duration: 128 Milliseconds elapsed for this Decryption'. At the bottom are 'Reset', 'Cancel', and 'OK' buttons.

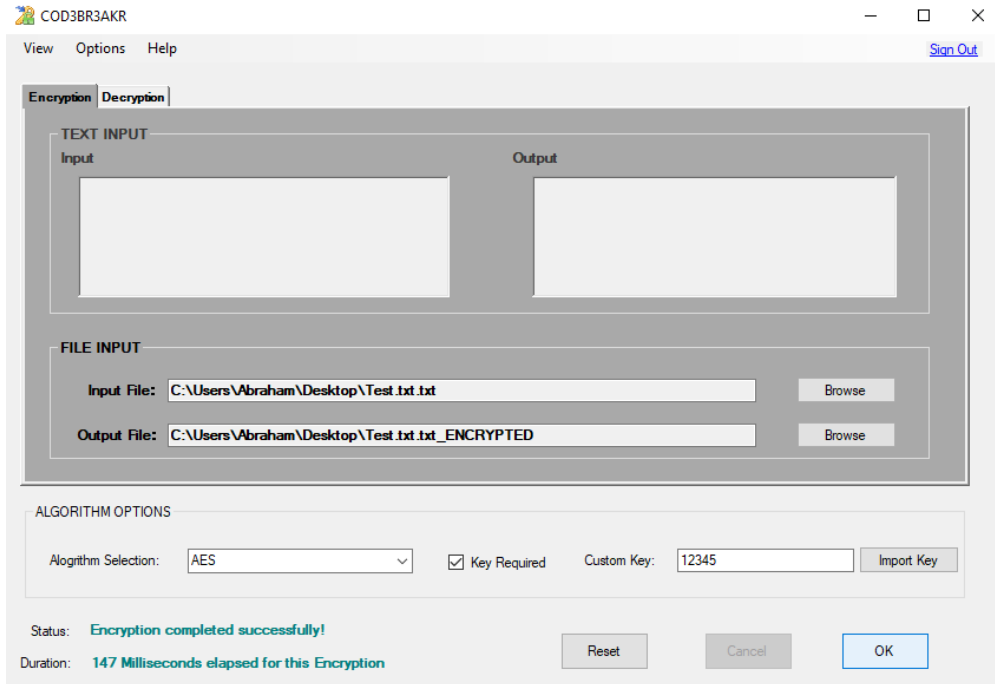
## 1.6 File Input

You can input plaintext data via a text file to be encrypted and decrypt the. Once the file input is logged with text, you can browse it and select the file. After the file is select, the output file location will be appeared. Select the algorithms and the key than selected click on the OK to process the encryption then output file would be generated.

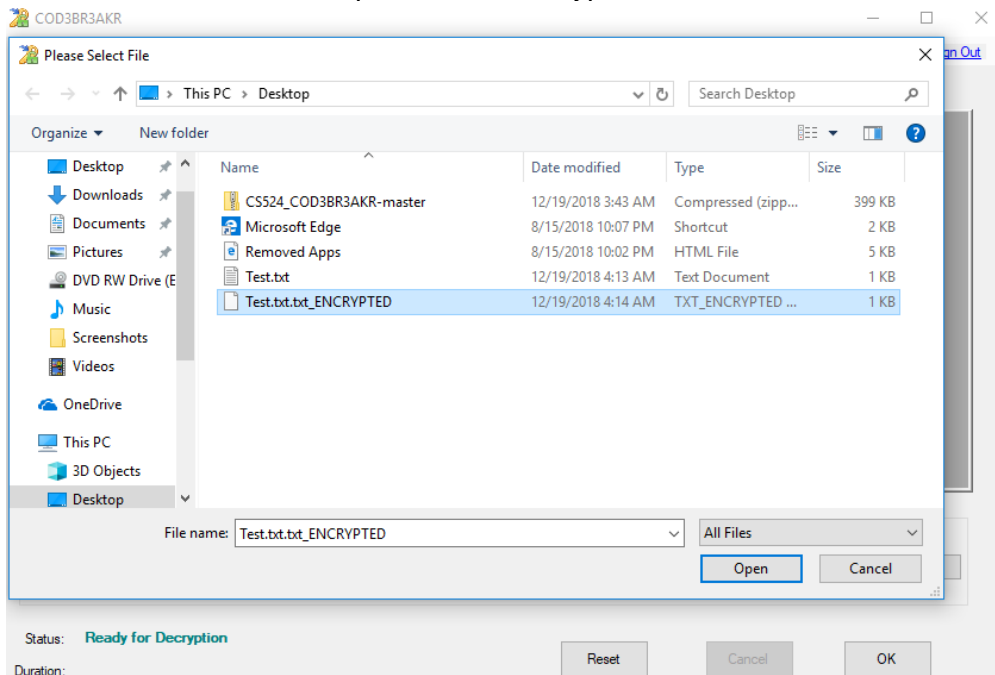
This is a close-up of the 'FILE INPUT' section. It contains two rows. The first row is 'Input File:' followed by a text input field and a 'Browse' button. The second row is 'Output File:' followed by a text input field and a 'Browse' button.








Once the encryption is completed successfully, you can click on the decryption tab. Then browse it and select the file that is encrypted. After the file is select the same algorithms and the key than selected click on the OK to process the decryption.



 COD3BR3AKR

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View Options Help

[Sign Out](#)

EncryptionDecryption

TEXT INPUT

Input

Output

FILE INPUT

Input File:

C:\Users\Abraham\Desktop\Test.txt.txt\_ENCRYPTED

Browse

Output File:

C:\Users\Abraham\Desktop\Test.txt.txt\_ENCRYPTED DECRYPTED

Browse

ALGORITHM OPTIONS

Alorithm Selection:

AES

Key Required

Custom Key:

12345

Import Key

Status: Ready for Decryption

Duration:

Reset

Cancel

OK

**COD3BR3AKR**

View Options Help [Sign Out](#)

**Encryption Decryption**

**TEXT INPUT**

Input Output

**FILE INPUT**

Input File: C:\Users\Abraham\Desktop\Test.txt.txt\_ENCRYPTED Browse

Output File: C:\Users\Abraham\Desktop\Test.txt.txt\_ENCRYPTED\_DECRYPTED Browse

**ALGORITHM OPTIONS**

Algorithm Selection: AES Key Required Custom Key: 12345 Import Key

Status: **Decryption completed successfully!**

Duration: **90 Milliseconds elapsed for this Decryption**

Reset Cancel OK

## 1.7 Algorithms Option

You can select one of the options to choose which encryption algorithm to use for encrypting including AES, RSA, and Triple-DES. Also, you have the option to input or import your encryption key.

**ALGORITHM OPTIONS**

Algorithm Selection: AES RSA TripleDES Key Required Custom Key: 12345 Import Key

## 1.8 Status and Duration

Status and duration will keep you track on activates that software is processing for encryption or decryption and the length of the duration of the process.

Ready to encryption

Status: **Ready for Encryption**

Duration:

Reset Cancel OK

Encryption Completed successfully

Status: **Encryption completed successfully!**

Duration: **147 Milliseconds elapsed for this Encryption**

Reset Cancel OK

Decryption Completed successfully

Status: **Decryption completed successfully!**

Duration: **90 Milliseconds elapsed for this Decryption**

Reset Cancel OK

## 2 USERS MANAGEMENT

COD3BR3AKR - AccountManagement

User Registration User Reset User Management

All Users

	User_ID	User_Name	User_Status
▶	1	Abdul	ACTIVE

Refresh

Add


Update

Delete

User Information

User ID: 1 User Name: Abdul

User Status: ACTIVE Password:



User Management service has several features include user account management. You can create a new user account manually by adding a valid Username, passwords or through user registration in login in windows. Also, you can choose the status for user by activating or inactivating them. We perform full CRUD operations.

## 2.1 Refresh user account information for new register users

You can active and inactive user, then click refresh to confirm the activation.

COD3BR3AKR - AccountManagement

User Registration User Reset User Management

All Users

	User_ID	User_Name	User_Status
▶	1	Abdul	ACTIVE

Refresh

Add

Update


Delete

User Information

User ID: 1 User Name: Jacob

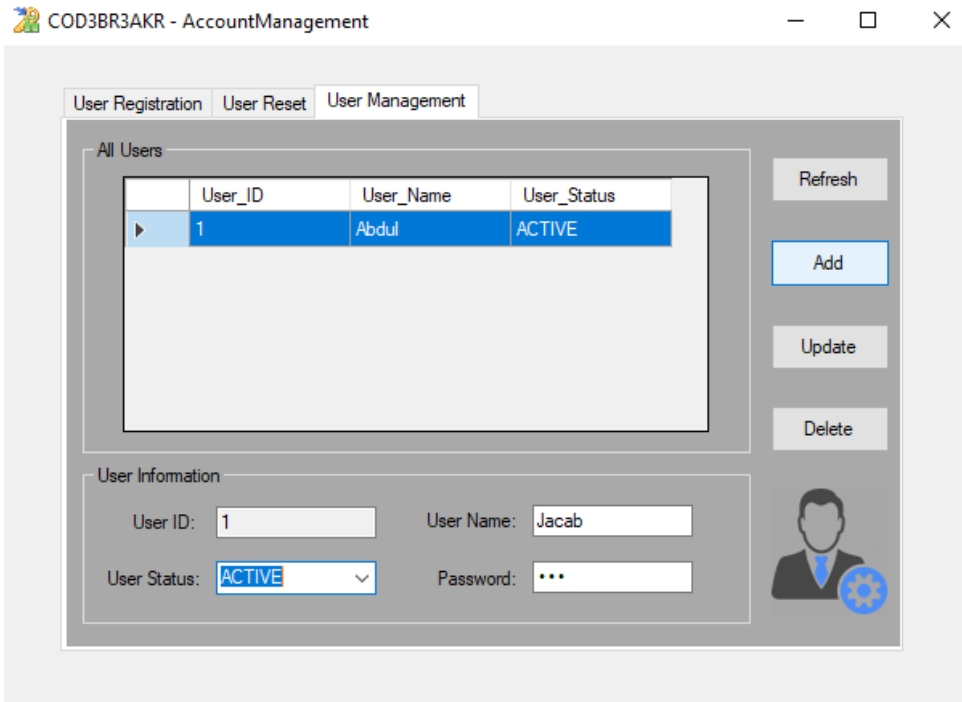
User Status: ACTIVE  
ACTIVE  
INACTIVE

Password: ...

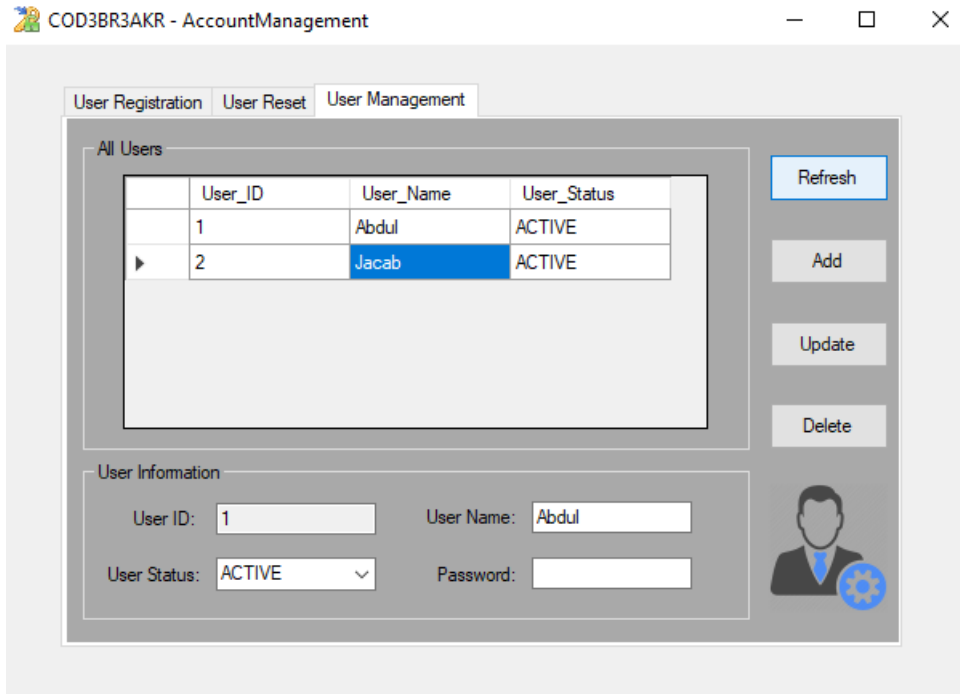


## 2.2 Adding new users

You can add new user by adding a valid username and passwords, then click the button Add.



After we refresh the software that we notice that Jacob is added



## 2.3 Update user account

You can update information such as the username or passwords

COD3BR3AKR - AccountManagement

User Registration User Reset User Management

All Users

	User_ID	User_Name	User_Status
	1	Abdul	ACTIVE
▶	2	Jacob	ACTIVE

Refresh

Add


Update

Delete

User Information

User ID: 2 User Name: Alex

User Status: ACTIVE Password: ...



Information



User Alex has been updated successfully!

OK

## 2.4 Delete user accounts

You can delete a user and a confirmation pop up will ask you to confirm that deletion.

