Design Patterns - BitcoinAbuse

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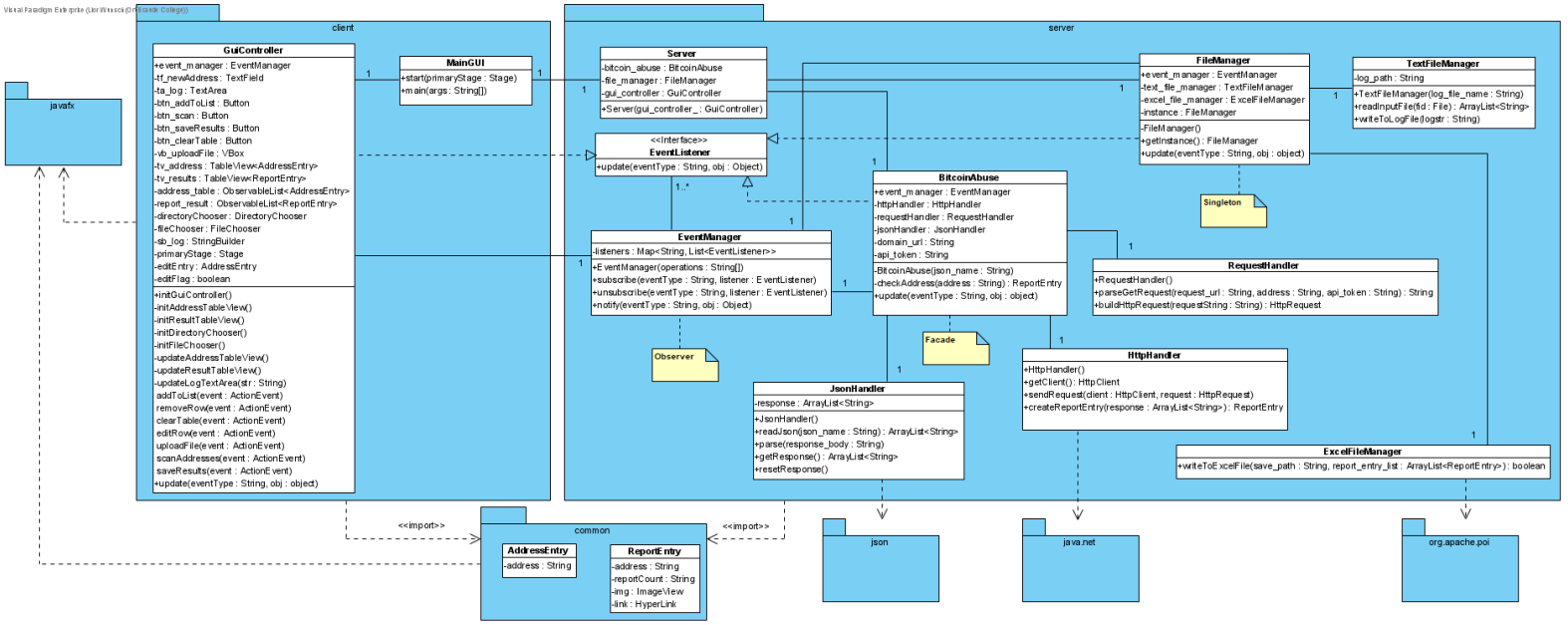
Liad Vaksman

Class Diagram & Design Patterns

As seen in yellow, we used the design patterns: Singleton, Facade, Observer.



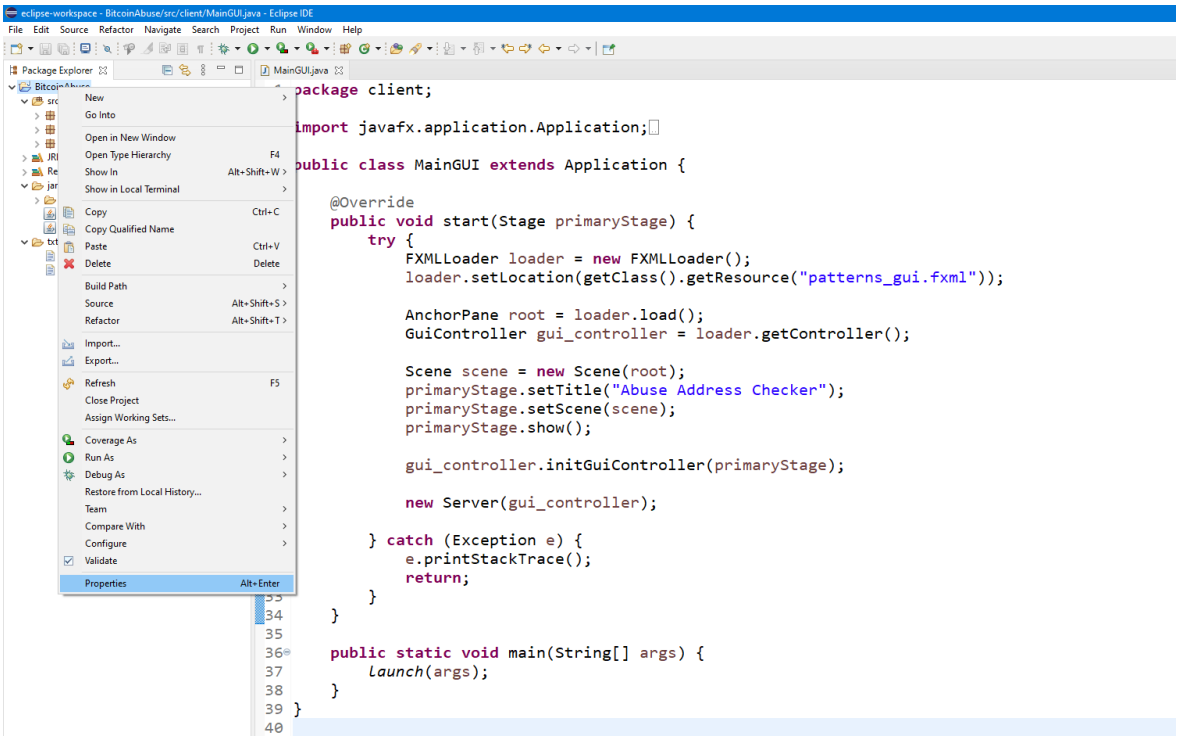
1. Singleton: used on the “FileManager” class which restricts the creation of the class to only one object at runtime, so that reading, and writing will be done through one source.

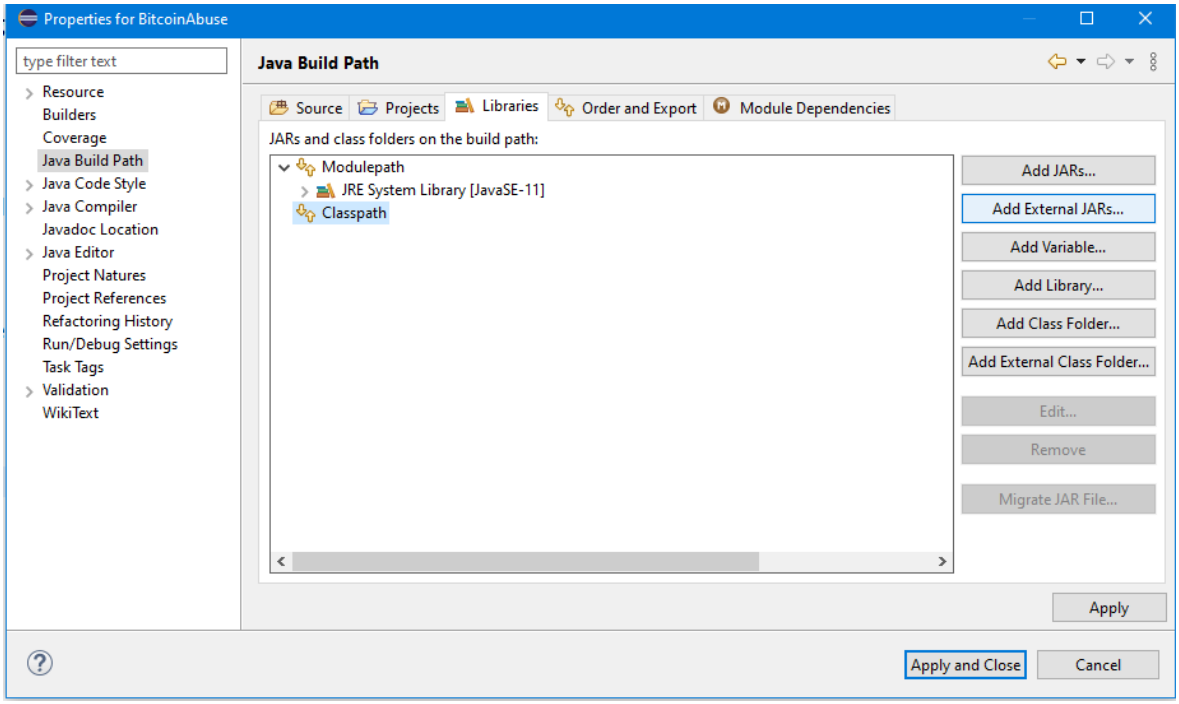
2. Facade: used on the “BitcoinAbuse” class for hiding the complexity of the “checkAddress” task, which gets an address and receives a report via the BitcoinAbuse API. The method contains lot of moving parts, by using Facade pattern we provide a one simple interface instead.

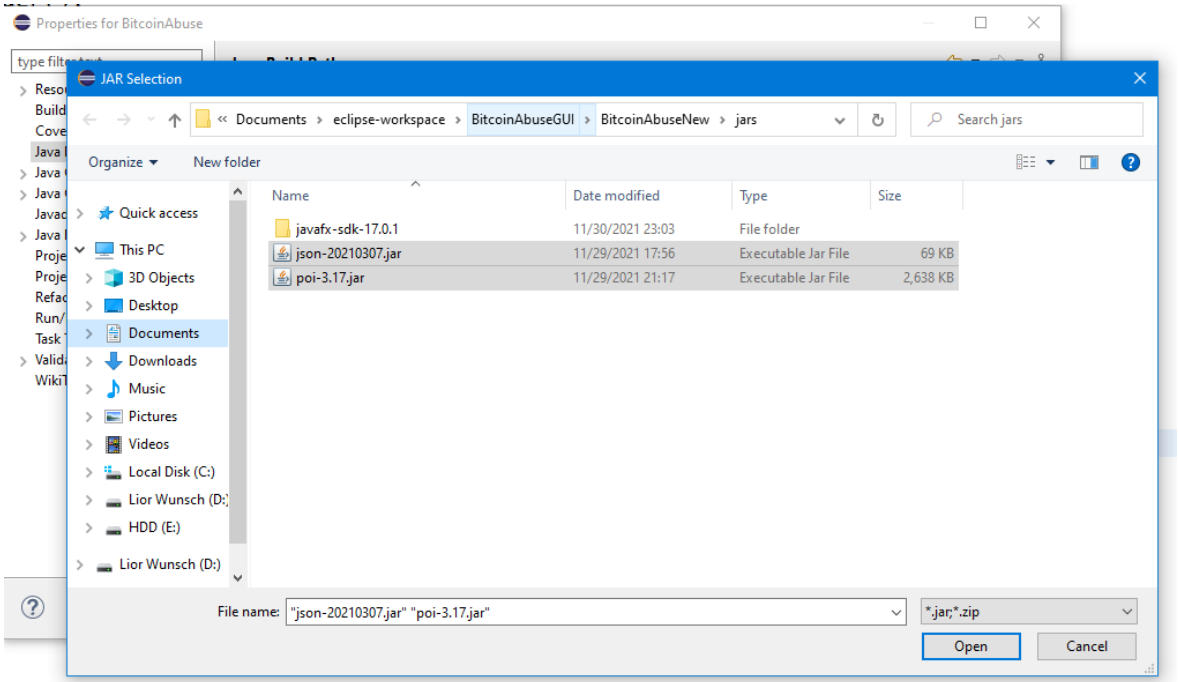
3. Observer: used on the “EventManager” class who notifies his listeners (other classes), on different events like scan, read or write, by that the listeners get an update on the event and act accordingly. For being a listener, the class have to implement the interface “EventListener”.

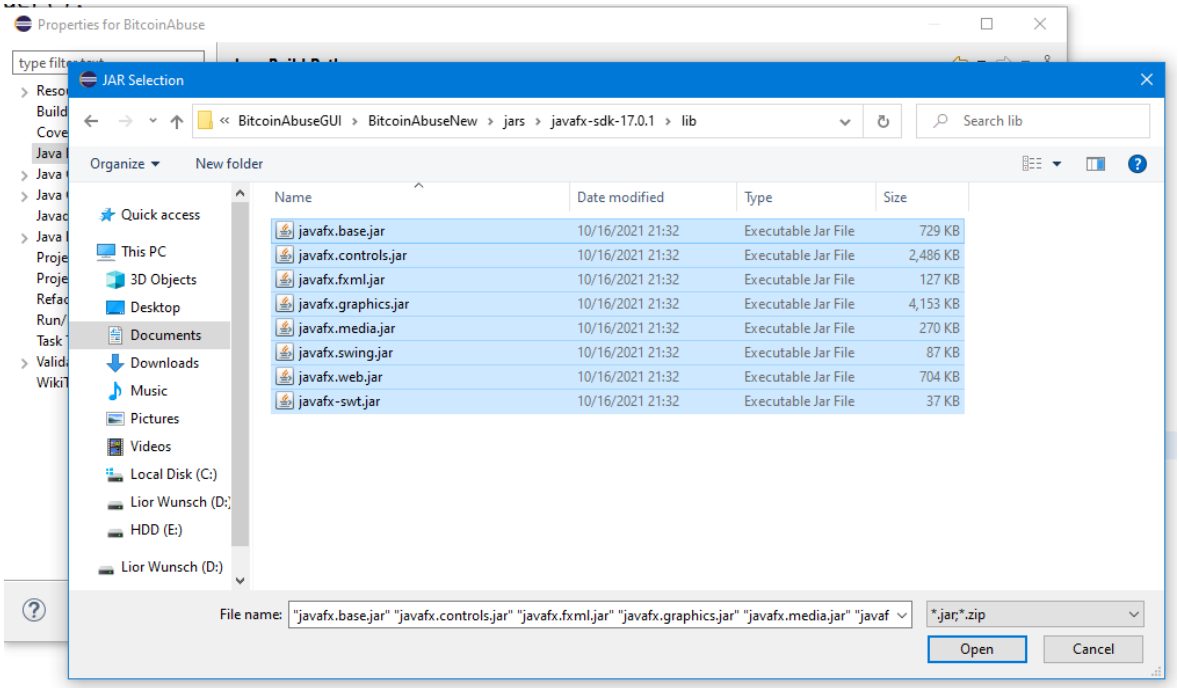
Configuration Manual

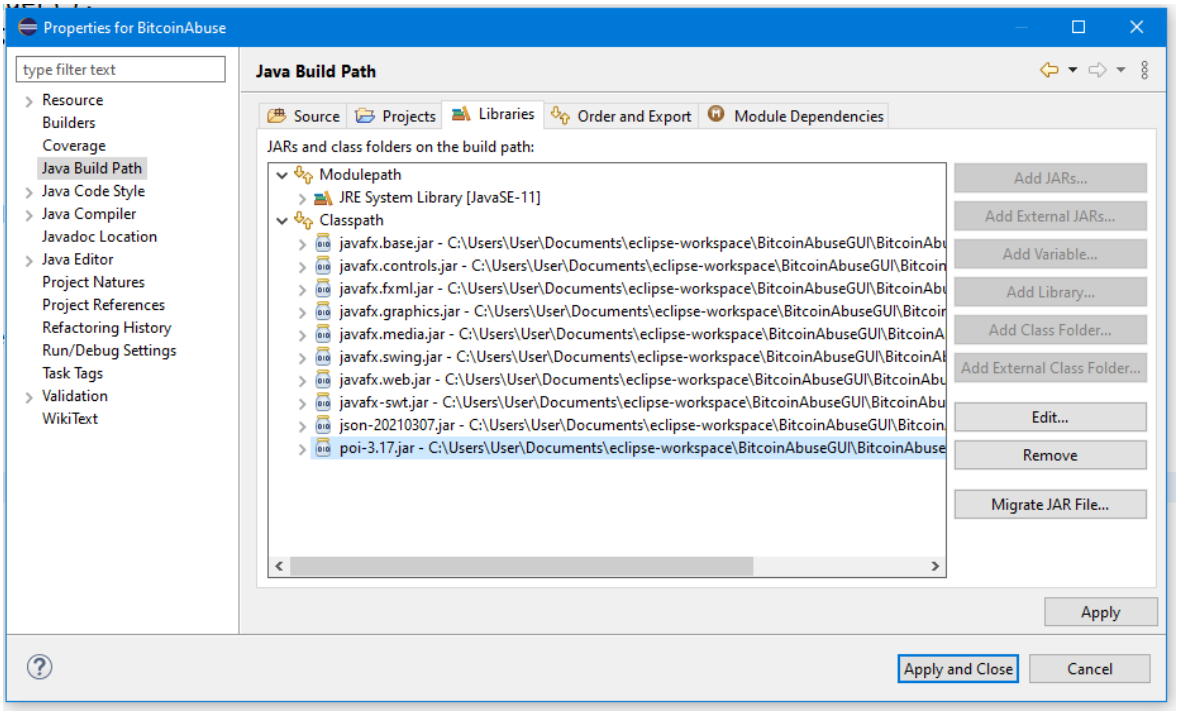
1. Add JAR files to build path:



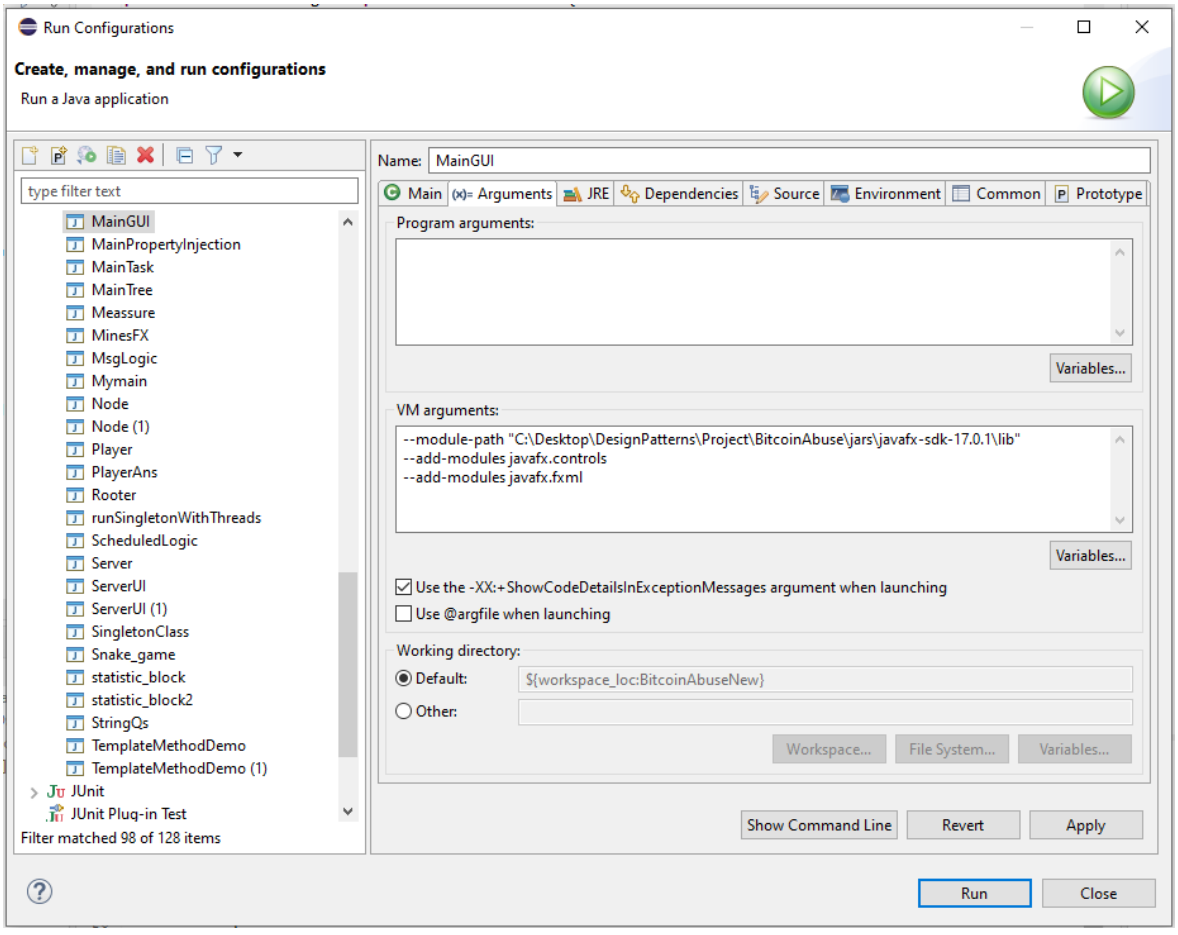



Properties for BitcoinAbuse
JAR Selection
Documents › eclipse-workspace › BitcoinAbuseGUI › BitcoinAbuseNew › jars
Search jars
Organize
New folder
Quick access
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
Local Disk (C:)
Lior Wunsch (D:)
HDD (E:)
Lior Wunsch (D:)
Name
Date modified
Type
Size
javafx-sdk-17.0.1
11/30/2021 23:03
File folder
json-20210307.jar
11/29/2021 17:56
Executable Jar File
69 KB
poi-3.17.jar
11/29/2021 21:17
Executable Jar File
2,638 KB
File name:
"json-20210307.jar" "poi-3.17.jar"
.jar;.zip
Open
Cancel


Properties for BitcoinAbuse
JAR Selection
BitcoinAbuseGUI › BitcoinAbuseNew › jars › javafx-sdk-17.0.1 › lib
Search lib
Organize
New folder
Quick access
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
Local Disk (C:)
Lior Wunsch (D:)
HDD (E:)
Lior Wunsch (D:)
Name
Date modified
Type
Size
javafx.base.jar
10/16/2021 21:32
Executable Jar File
729 KB
javafx.controls.jar
10/16/2021 21:32
Executable Jar File
2,486 KB
javafx.fxml.jar
10/16/2021 21:32
Executable Jar File
127 KB
javafx.graphics.jar
10/16/2021 21:32
Executable Jar File
4,153 KB
javafx.media.jar
10/16/2021 21:32
Executable Jar File
270 KB
javafx.swing.jar
10/16/2021 21:32
Executable Jar File
87 KB
javafx.web.jar
10/16/2021 21:32
Executable Jar File
704 KB
javafx-swt.jar
10/16/2021 21:32
Executable Jar File
37 KB
File name:
"javafx.base.jar" "javafx.controls.jar" "javafx.fxml.jar" "javafx.graphics.jar" "javafx.media.jar" "javaf
.jar;.zip
Open
Cancel

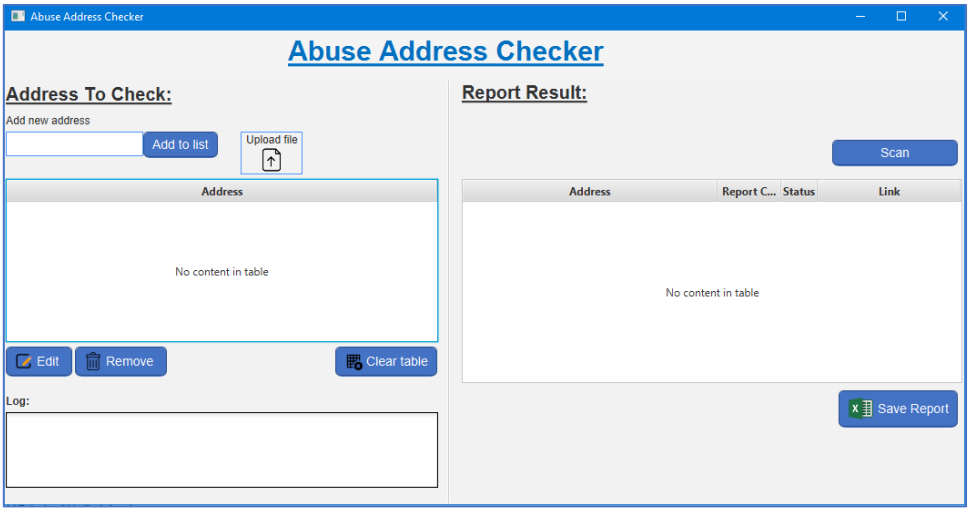


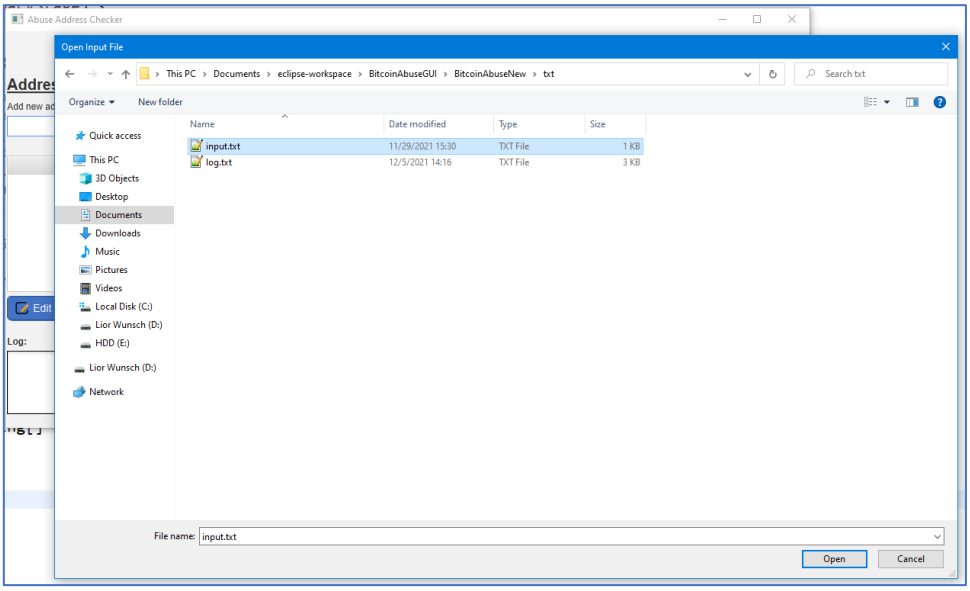
2. Edit run configuration:
   add the VM arguments with the right paths

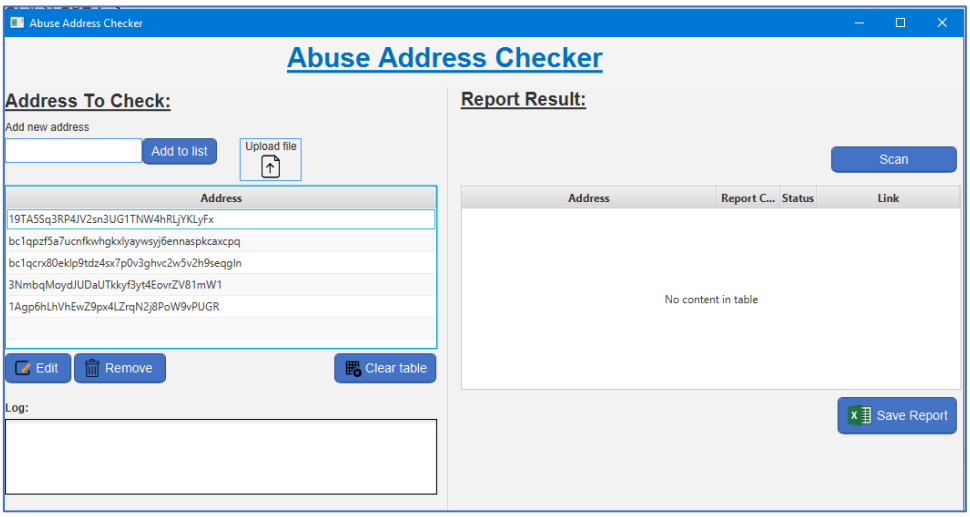


User Manual

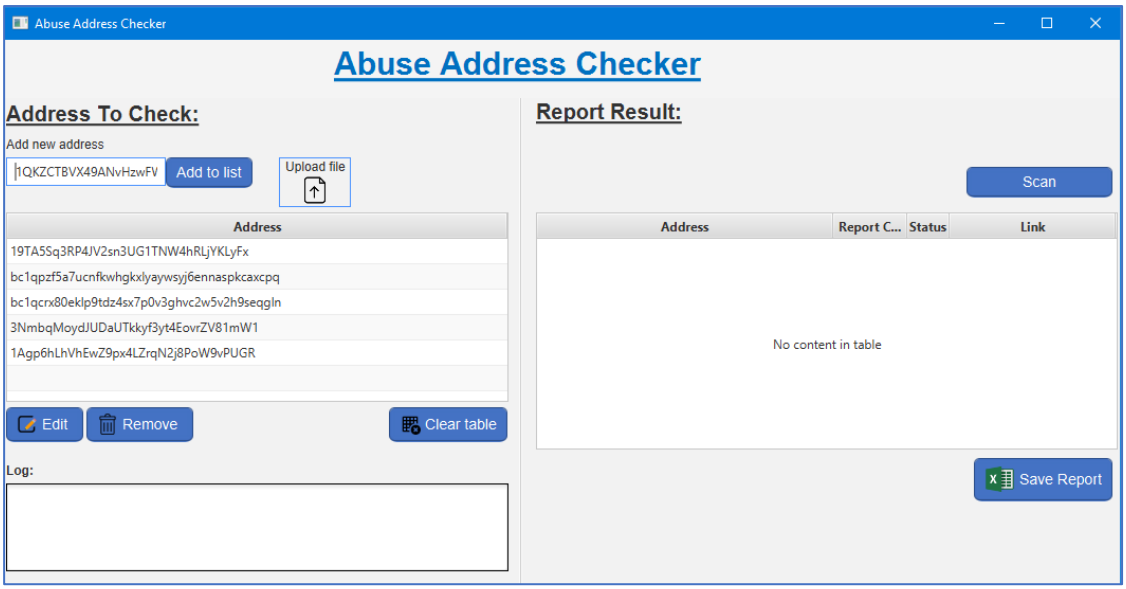
1. **Upload file**:
    a. press on “Upload file” button
    b. Choose file and press open

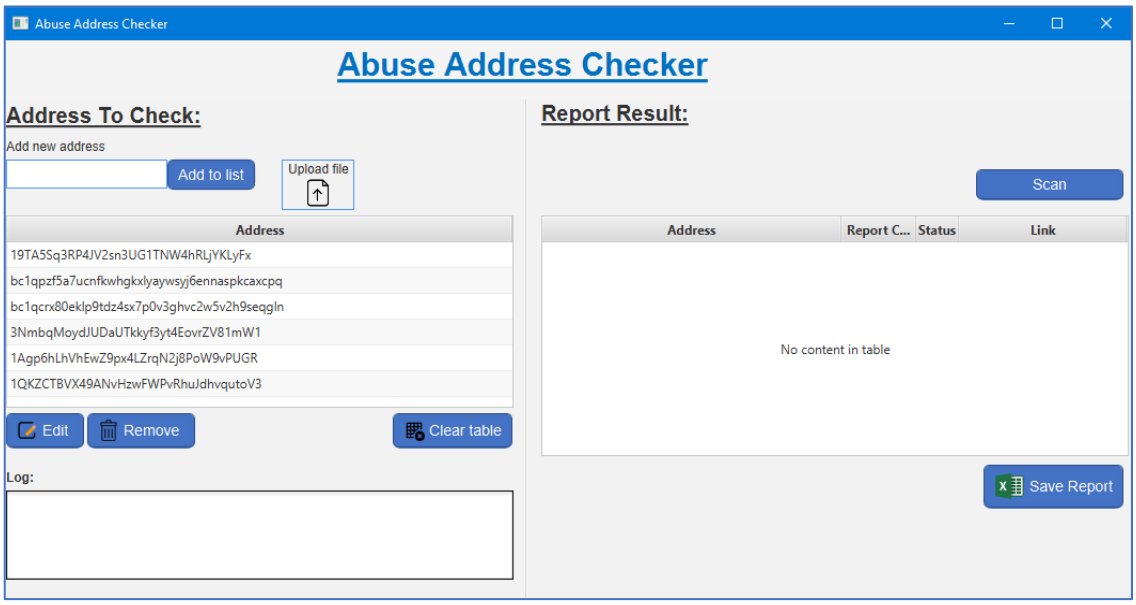




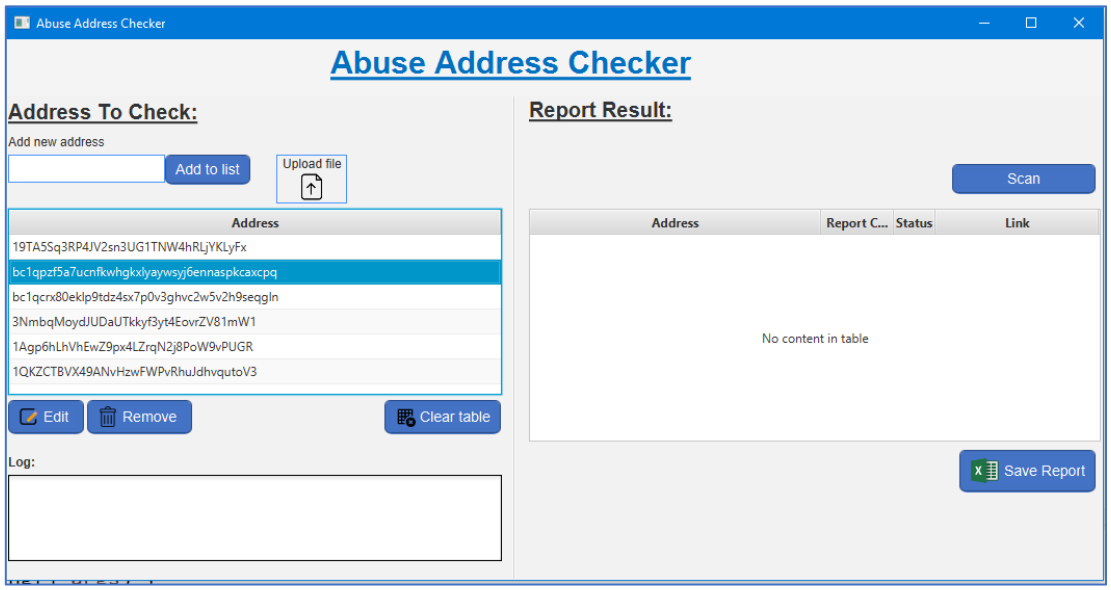


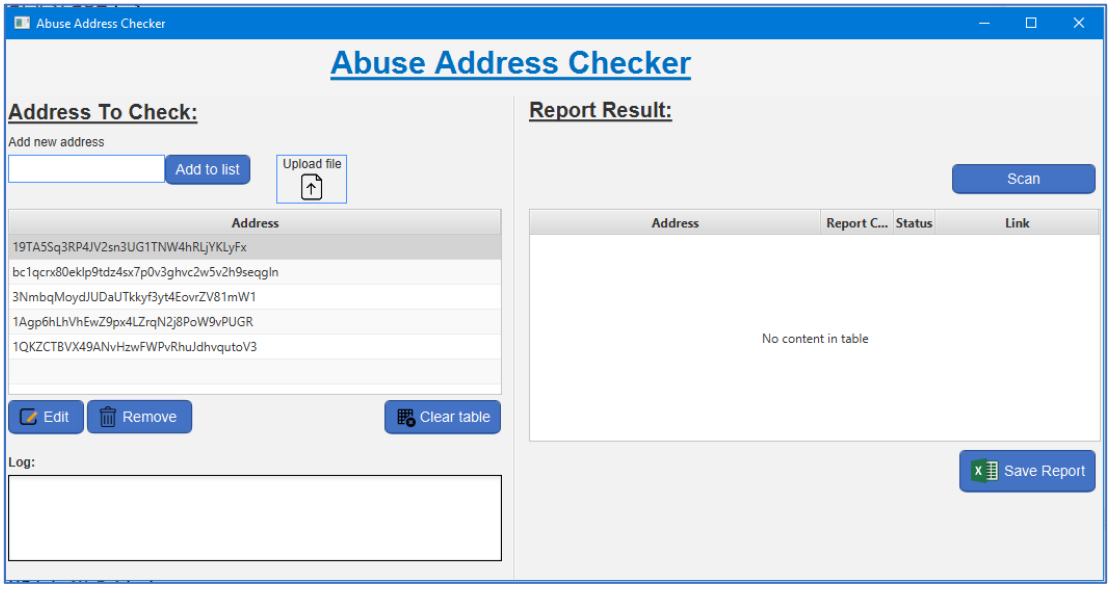
2. **Add new address**:
    a. Fill the text filled with wanted address
    b. Press on “Add to list” button



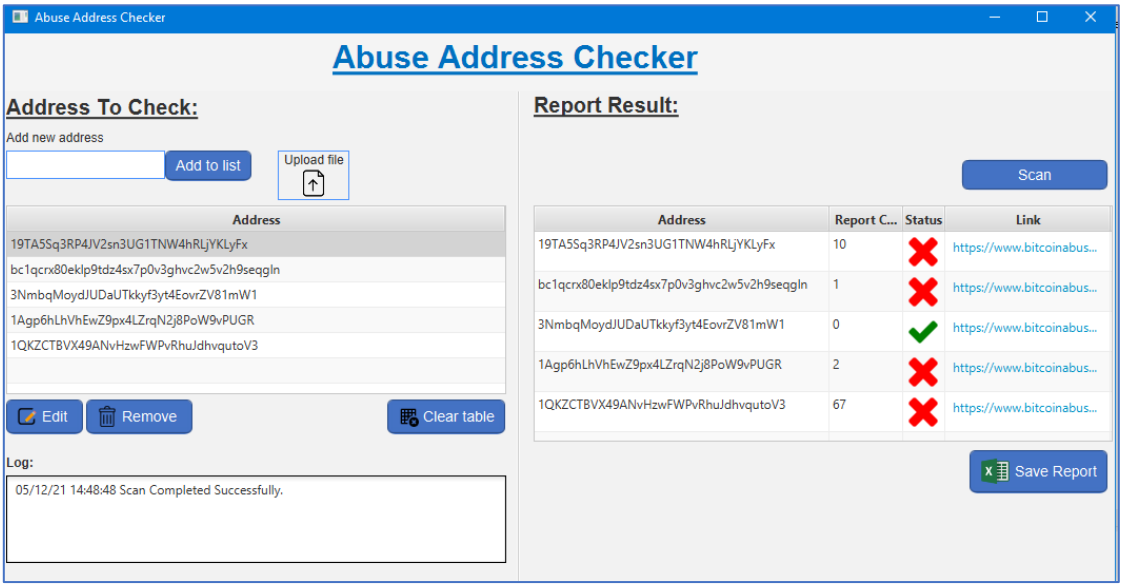


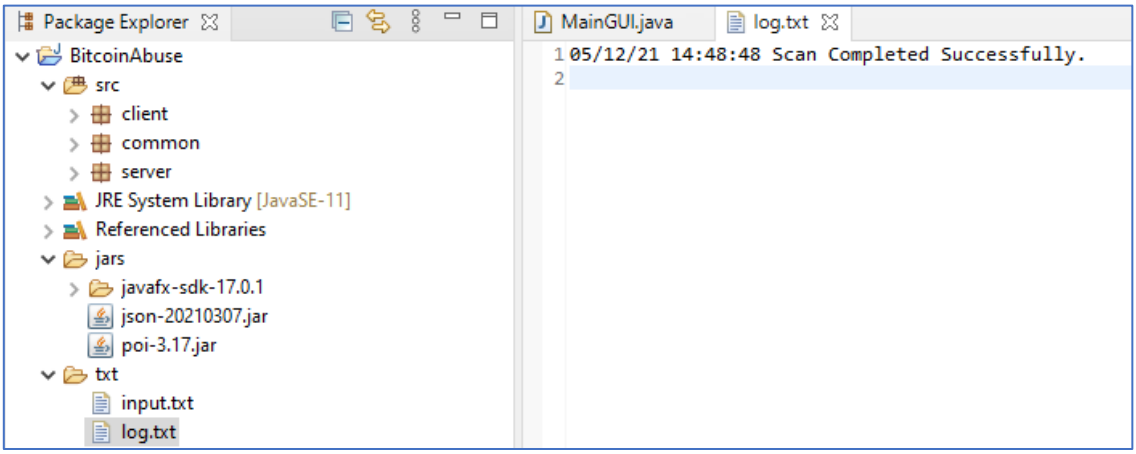
3. **Remove address**:
    a. Press on address entry from the table
    b. Press on “Remove” button



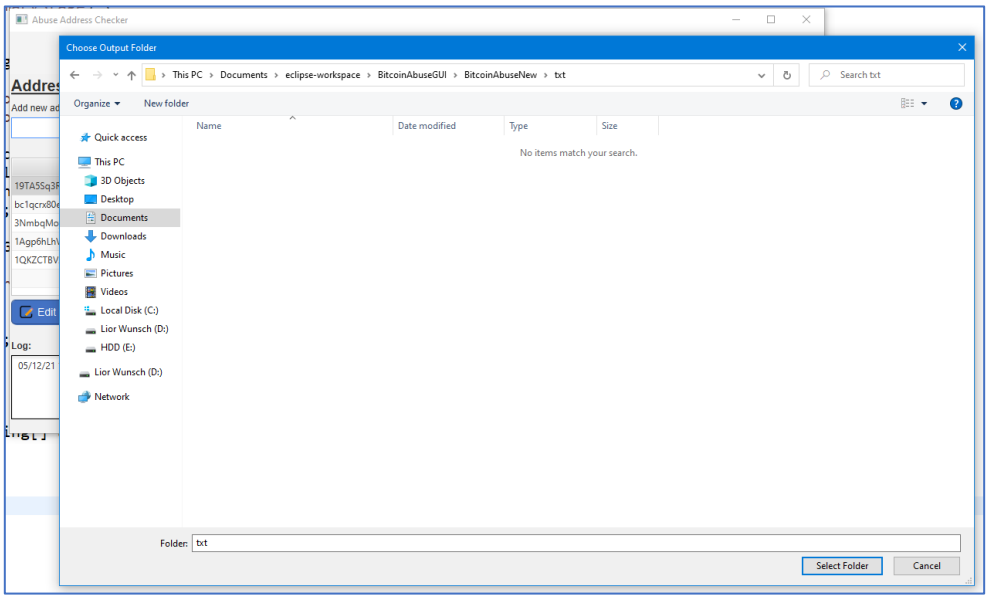


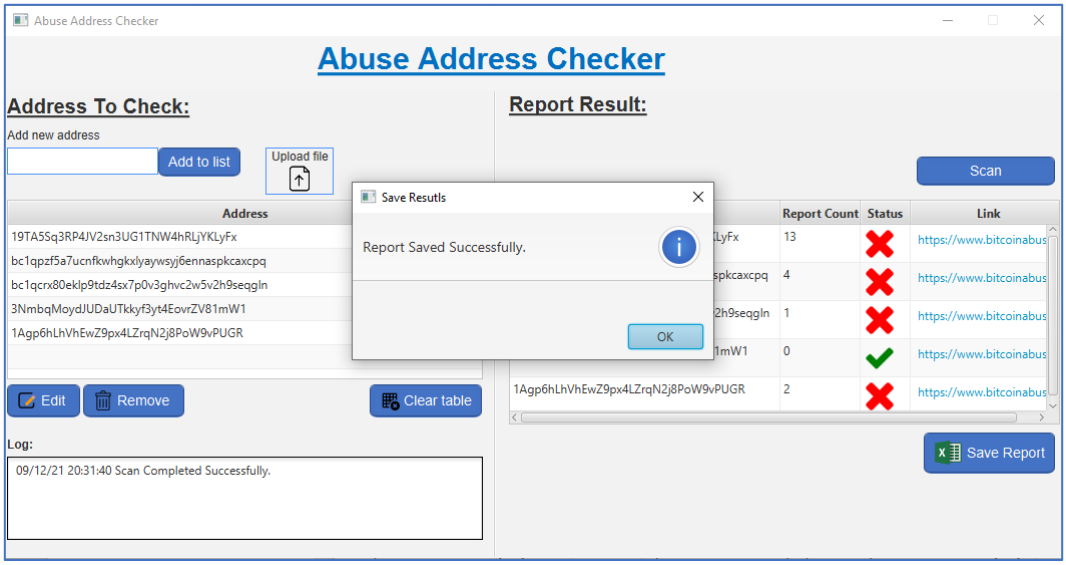
4. **Scan**:
    a. Press on “Scan” button





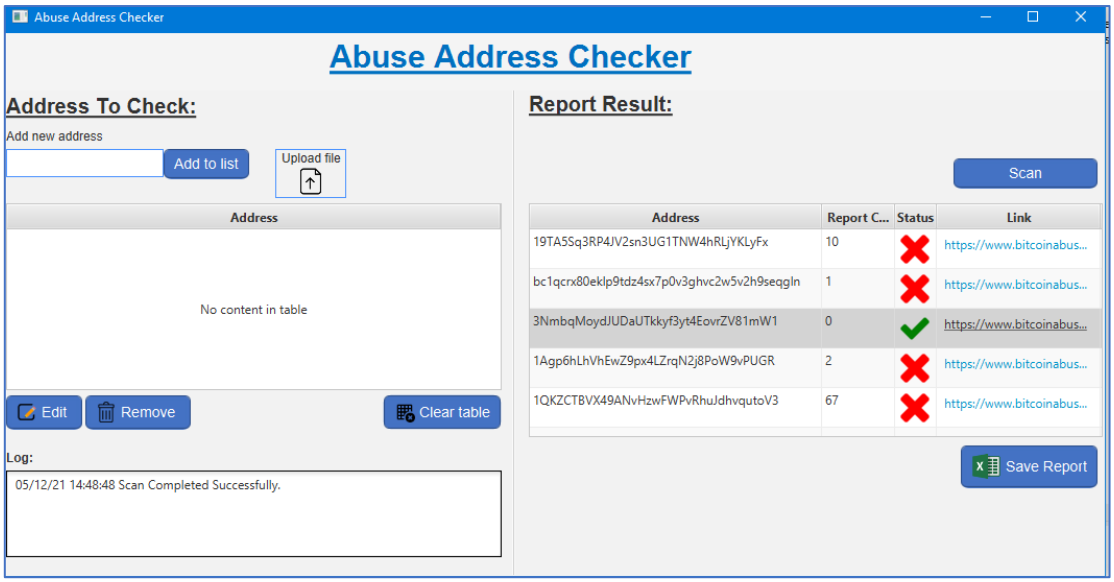
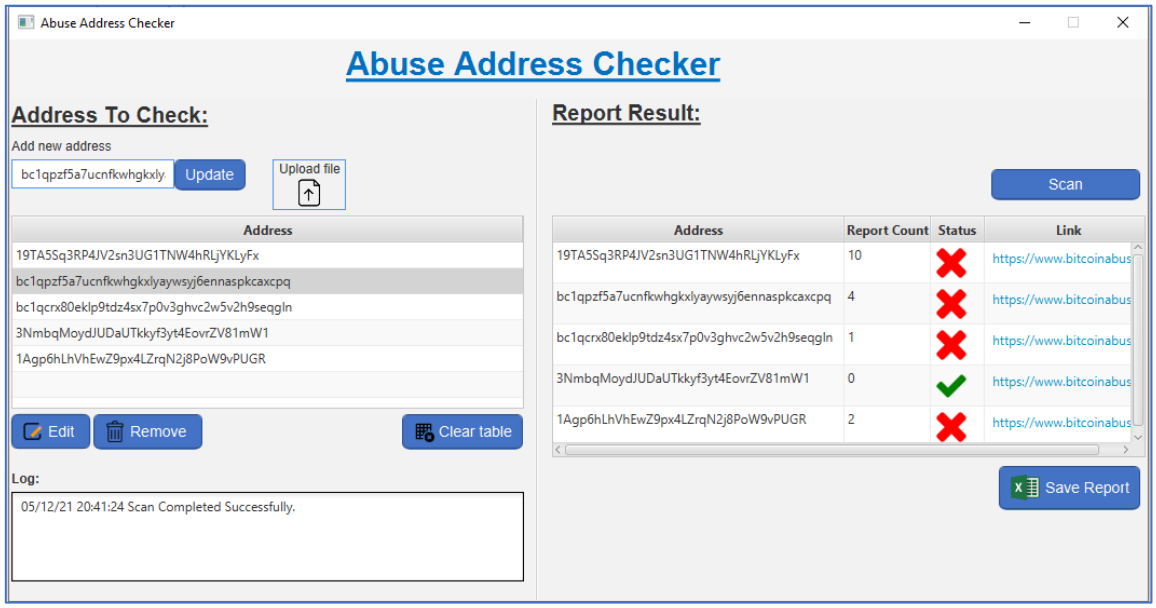
5. **Save Report**:
    a. Press on “Save Report” button
    b. Select a folder to save the file
    c. Notification popup will show up





	A	B	C	D	E	F	G	H	I	J
1	Address	Report Count	Link							
2	19TA5Sq3RP4JV2sn3UG1TNW4hRLjYKLyFx	10	https://www.bitcoinabuse.com/api/reports/19TA5Sq3RP4JV2sn3UG1TNW4hRLjYKLyFx							
3	bc1qcrx80eklp9tdz4sx7p0v3ghvc2w5v2h9seqgln	1	https://www.bitcoinabuse.com/api/reports/bc1qcrx80eklp9tdz4sx7p0v3ghvc2w5v2h9seqgln							
4	3NmbqMoydJUDaUTkkyf3yt4EovrZV81mW1	0	https://www.bitcoinabuse.com/api/reports/3NmbqMoydJUDaUTkkyf3yt4EovrZV81mW1							
5	1Agp6hLhVhEwZ9px4LZrqN2j8PoW9vPUGR	2	https://www.bitcoinabuse.com/api/reports/1Agp6hLhVhEwZ9px4LZrqN2j8PoW9vPUGR							
6	1QKZCTBVX49ANvHzwFWPvRhuJdhvqutoV3	67	https://www.bitcoinabuse.com/api/reports/1QKZCTBVX49ANvHzwFWPvRhuJdhvqutoV3							
7										
8										
9										

6. **Clear table**:
    a. Press on “Clear table”



7. **Edit address**:
    a. Press on address entry from the table
    b. Press on “Edit” button the address will appear in text field
    c. Edit the address and press on “Update” button