

User Manual for EtherAttack

1) Visit <https://github.com/Xenomii/EtherAttack> to view EtherAttack Project

2) Clone the EtherAttack project on GitHub through this link below:

<https://github.com/Xenomii/EtherAttack>

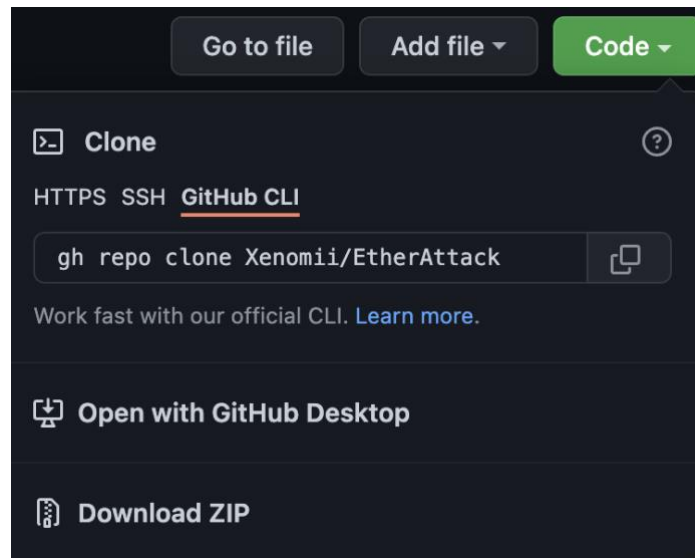


Figure 1 Clone from GitHub

3) Open terminal and type:

\$ git clone <https://github.com/Xenomii/EtherAttack>

```
Last login: Sun Apr  3 15:21:23 on ttys003
brilliantstar@Stellars-MacBook-Pro ~ % git clone https://github.com/Xenomii/EtherAttack
```

Figure 2 Git clone on Terminal

- 4) Press Enter to clone the project.

```
ETHERATTACK
Cloning into 'EtherAttack'...
remote: Enumerating objects: 479, done.
remote: Counting objects: 100% (479/479), done.
remote: Compressing objects: 100% (334/334), done.
remote: Total 479 (delta 268), reused 325 (delta 136), pack-reused 0
Receiving objects: 100% (479/479), 29.89 MiB | 7.05 MiB/s, done.
Resolving deltas: 100% (268/268), done.
```

Figure 3 EtherAttack successfully cloned

- 5) Enter the path of the where EtherAttack is located

Eg: `cd Path_Of_EtherAttack`

```
/Users/brilliantstar
brilliantstar@Stellars-MacBook-Pro ~ % cd /Users/brilliantstar/GitHub/EtherAttack
```

Figure 4 locate EtherAttack

- 6) Cd to webapp

Eg: `cd webapp`

```
brilliantstar@Stellars-MacBook-Pro ~ % cd /Users/brilliantstar/GitHub/EtherAttack
brilliantstar@Stellars-MacBook-Pro EtherAttack % cd webapp
```

Figure 5 cd webapp

- 7) Install python virtual environment

`sudo apt install python3-pip python3-venv`

- 8) Create a python virtual environment by inputting the command:

`python3 -m venv venv`

`. venv/bin/activate`

```
brilliantstar@Stellars-MacBook-Pro webapp % python3 -m venv venv  
brilliantstar@Stellars-MacBook-Pro webapp % . venv/bin/activate
```

Figure 6 create virtual environment

9) (.venv) will appear at the start of the directory terminal output.

```
[(venv) brilliantstar@Stellars-MacBook-Pro webapp %
```

Figure 7 (.venv) appearing at the start of directory terminal

10) Install dependencies that is required for this project using pip:

```
pip install -r requirements.txt
```

```
pip install Flask
```

```
[(venv) brilliantstar@Stellars-MacBook-Pro webapp % pip install -r requirements.txt
```

```
[(venv) brilliantstar@Stellars-MacBook-Pro webapp % pip install Flask  
Requirement already satisfied: Flask in /venv/lib/python3.10/site-packages
```

Figure 8 pip install

11) Install solidity compiler :

```
solc-select install 0.6.10
```

```
[(venv) brilliantstar@Stellars-MacBook-Pro webapp %  
(venv) brilliantstar@Stellars-MacBook-Pro webapp % solc-select install 0.6.10
```

Figure 9 install solidity compiler

12) Verify that the compiler is installed

solc-select versions

```
version '0.6.10' installed.  
[(venv) brilliantstar@Stellars-MacBook-Pro webapp % solc-select versions  
0.6.10 (current, set by /Users/brilliantstar/.solc-select/global-version)
```

Figure 10 verify that compiler is well installed

13) Run the application

```
python3 app.py
```

```
[(venv) brilliantstar@Stellars-MacBook-Pro webapp % python app.py  
* Serving Flask app 'app' (lazy loading)  
* Environment: production  
  WARNING: This is a development server. Do not use it in a production deployment.  
  Use a production WSGI server instead.  
* Debug mode: on  
* Running on http://127.0.0.1:5000 (Press CTRL+C to quit)  
* Restarting with stat  
* Debugger is active!  
* Debugger PIN: 295-929-250
```

Figure 11 run the application

14) Visit <http://127.0.0.1:5000> . EtherAttack webpage would be shown

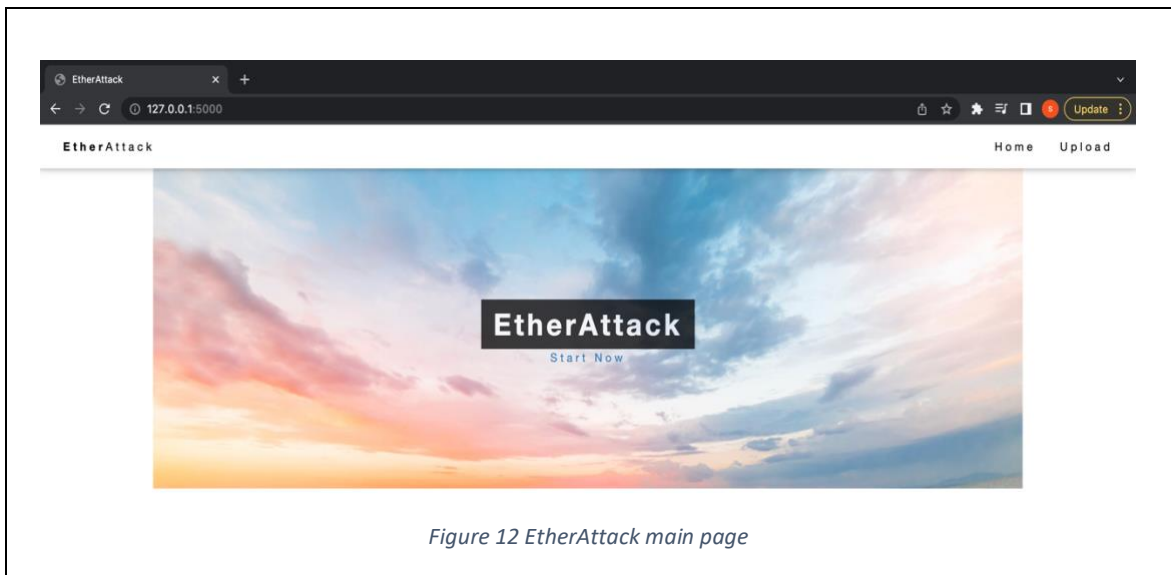


Figure 12 EtherAttack main page

15) Click on upload on the main page and will be directed to the upload page to upload smart contracts.

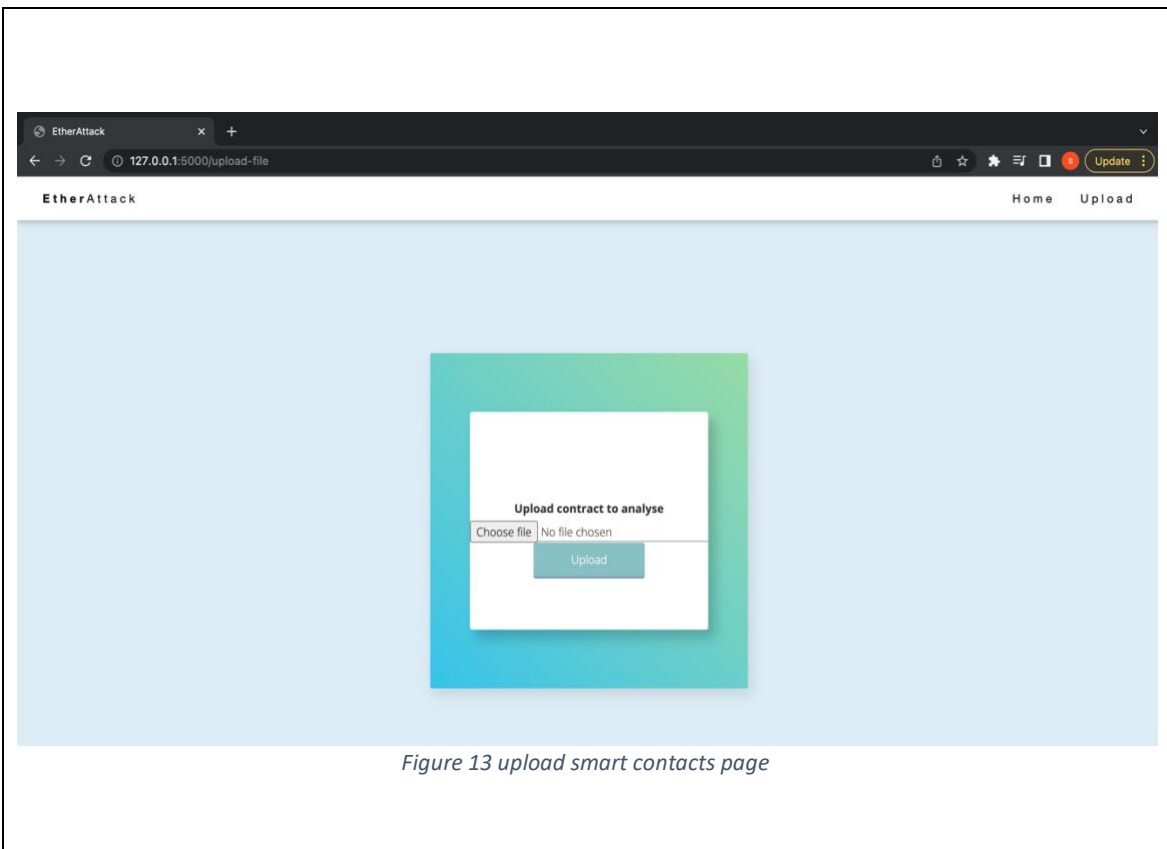


Figure 13 upload smart contacts page

16) Choose a smart contract to upload. For this example a vulnerable smart contract is been chosen.

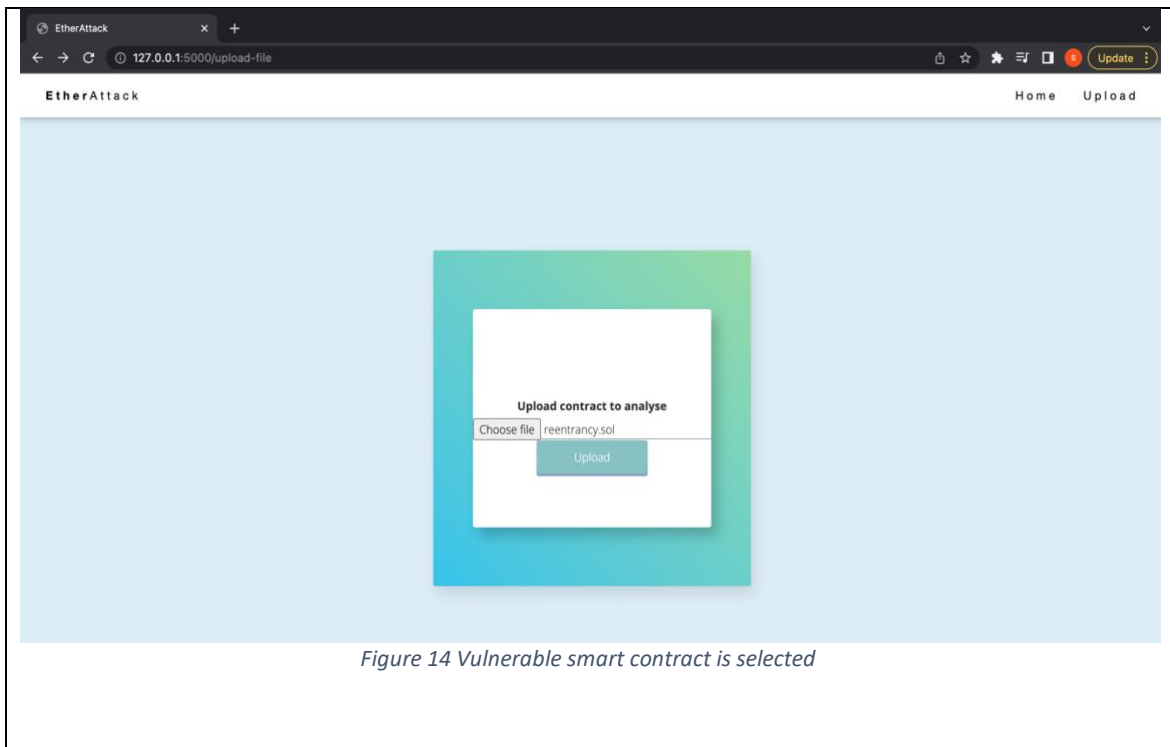


Figure 14 Vulnerable smart contract is selected

- 17) Press upload to be directed to the analysis page. Analysis page will show detail analysis. This includes : Attack contract, Slither static analysis , variable data dependencies , summary of functions and contract summary.

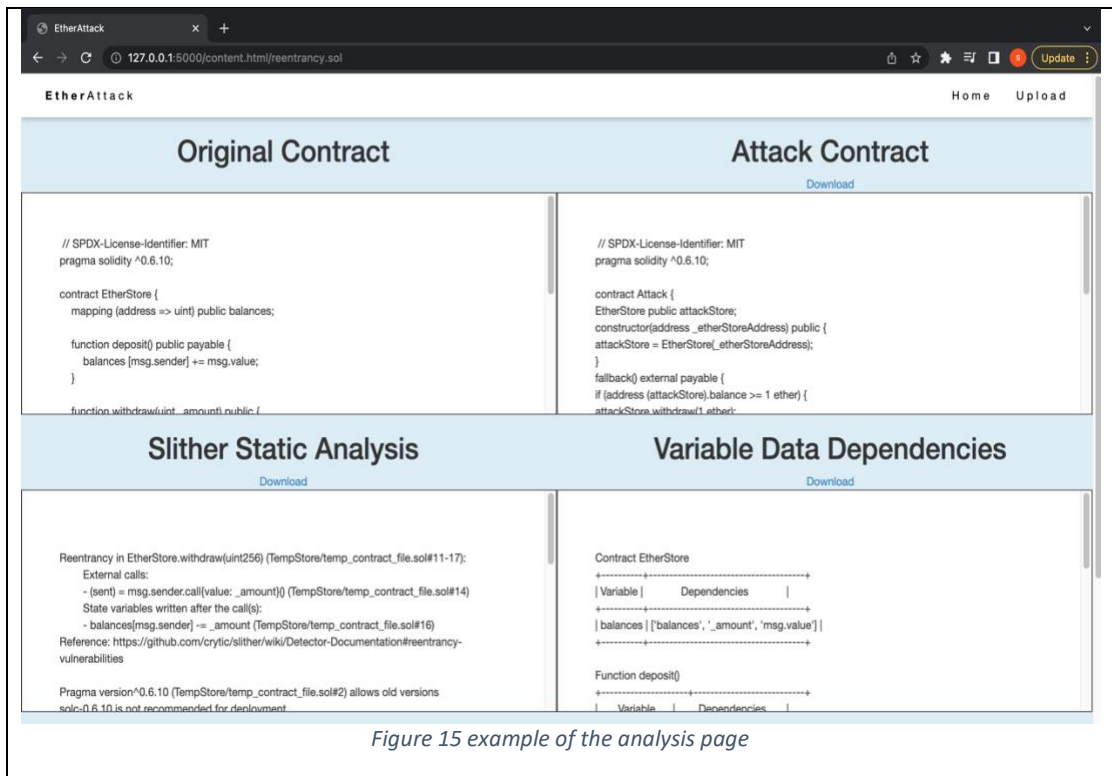


Figure 15 example of the analysis page

18) Press download to download the analysed data.

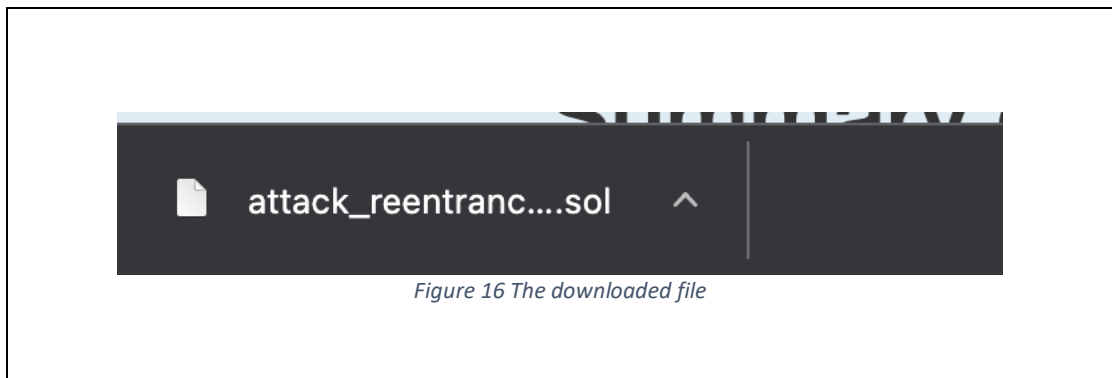


Figure 16 The downloaded file

- 19) If there is no vulnerable in the smart contract , a no vulnerabilities notice will be shown under the Attack Contract section in the analysis page.

