



Evaluation of an open source community on GitHub:

The example of Remix

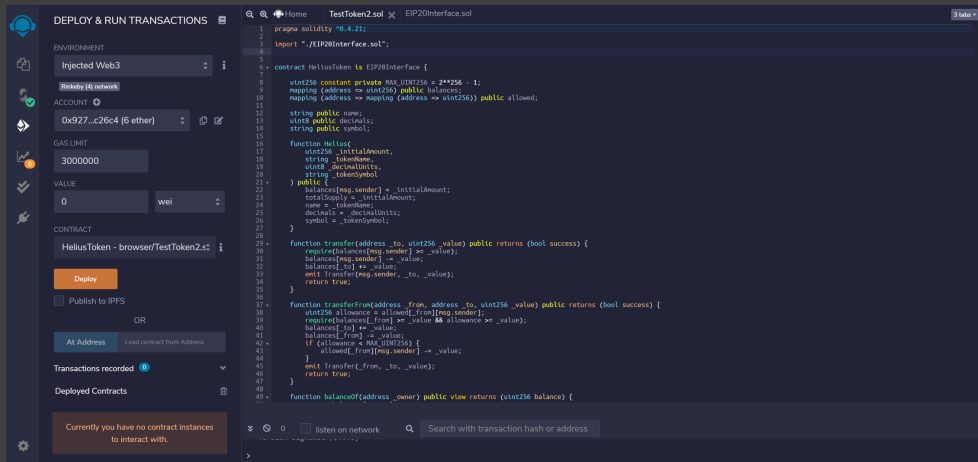
Structure :

- Introduction of Remix
- Remix GitHub stats (stars/forks)
- Interesting interactions (Issues / Lables / PRs)
- Assessment of Remix





- Web-based development interface for programming in Solidity.
- Created by the Ethereum Foundation
- Open source under MIT license: source code of the project can be freely used, modified, and distributed



Remix interface

The image shows the Remix IDE interface, which is used for developing, testing, and deploying smart contracts. The interface is divided into two main sections: the left sidebar for deployment and transaction management, and the right pane for the code editor.

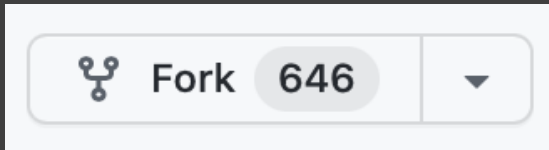
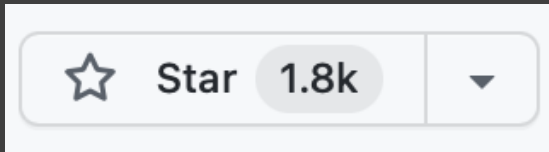
Left Sidebar: DEPLOY & RUN TRANSACTIONS

- ENVIRONMENT:** Set to "Injected Web3".
- ACCOUNT:** Set to "0x927...c26c4 (6 ether)".
- GAS LIMIT:** Set to "3000000".
- VALUE:** Set to "0" with the unit "wei".
- CONTRACT:** Set to "HeliusToken - browser/TestToken2.s".
- Buttons:** "Deploy" (orange), "Publish to IPFS" (checkbox), "At Address" (button), and "Load contract from Address" (button).
- Transactions recorded:** 0.
- Deployed Contracts:** A list of deployed contracts.
- Message:** "Currently you have no contract instances to interact with."

Right Pane: Code Editor

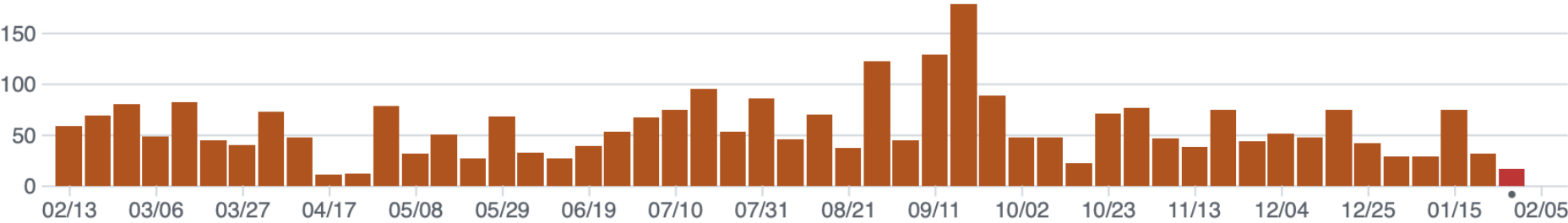
The code editor shows the Solidity code for the "TestToken2.sol" file. The code is as follows:

```
1 pragma solidity ^0.4.21;
2
3 import "../EIP20Interface.sol";
4
5
6 contract HeliusToken is EIP20Interface {
7
8     uint256 constant private MAX_UINT256 = 2**256 - 1;
9     mapping (address => uint256) public balances;
10    mapping (address => mapping (address => uint256)) public allowed;
11
12    string public name;
13    uint8 public decimals;
14    string public symbol;
15
16    function Helius(
17        uint256 _initialAmount,
18        string _tokenName,
19        uint8 _decimalUnits,
20        string _tokenSymbol
21    ) public {
22        balances[msg.sender] = _initialAmount;
23        totalSupply = _initialAmount;
24        name = _tokenName;
25        decimals = _decimalUnits;
26        symbol = _tokenSymbol;
27    }
28
29    function transfer(address _to, uint256 _value) public returns (bool success) {
30        require(balances[msg.sender] >= _value);
31        balances[msg.sender] -= _value;
32        balances[_to] += _value;
33        emit Transfer(msg.sender, _to, _value);
34        return true;
35    }
36
37    function transferFrom(address _from, address _to, uint256 _value) public returns (bool success) {
38        uint256 allowance = allowed[_from][msg.sender];
39        require(balances[_from] >= _value && allowance >= _value);
40        balances[_to] += _value;
41        balances[_from] -= _value;
42        if (allowance < MAX_UINT256) {
43            allowed[_from][msg.sender] -= _value;
44        }
45        emit Transfer(_from, _to, _value);
46        return true;
47    }
48
49    function balanceOf(address _owner) public view returns (uint256 balance) {
```



- **Stars on GitHub are a way to show support and appreciation for a project**
- **Forks are a way for users to take a copy of a repository and make their own modifications to the code**

Evolution of the number of commits



Overview of active issues and pull requests

January 5, 2023 – February 5, 2023

Period: 1 month ▾

Overview

48 Active pull requests

41 Active issues

36

Merged pull requests

12

Open pull requests

25

Closed issues

16

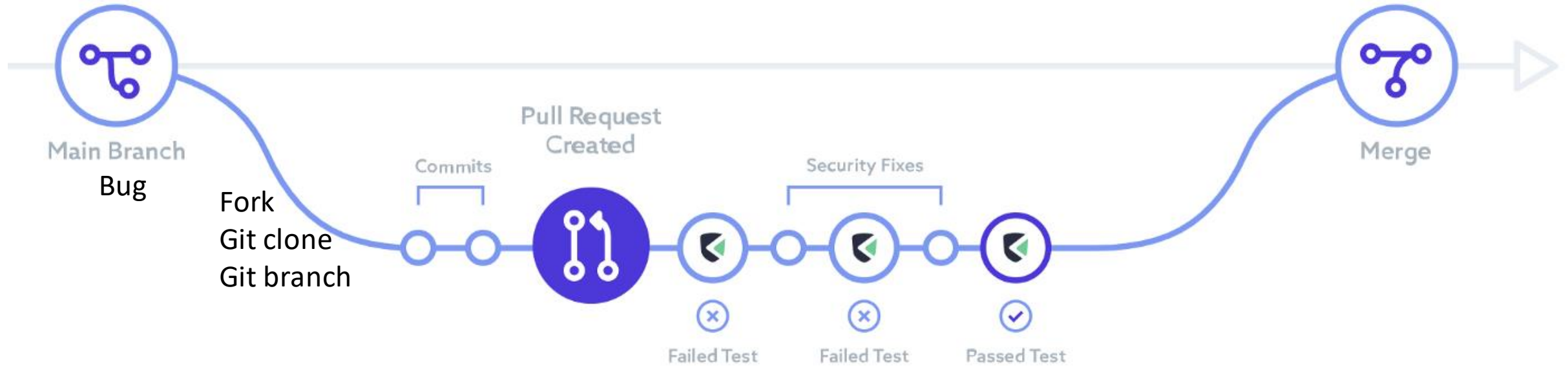
New issues






Issues, Labels, Milestones, Pull requests.....

The screenshot shows the GitHub Issues interface for the `ethereum/remix-project` repository. The top navigation bar includes links for Code, Issues (603), Pull requests (46), Actions, Projects (25), Security, and Insights. A prominent message asks contributors to read the guidelines before opening an issue. Below this, a search bar shows the filter `is:issue is:open`. To the right of the search bar are buttons for Labels (90) and Milestones (4), along with a green 'New issue' button. The main content area displays a list of open issues, with the first three visible:

- 603 Open** (959 Closed) | Author | Label | Projects | Milestones | Assignee | Sort
- When deploying contracts, why would you not store the contract addresses so that they are available after closing the explorer?**
#3343 opened yesterday by `stebansaa`
- Compilation details modal: Function hashes is empty** (bug)
#3341 opened 2 days ago by `yann300`
- Hidden files/folders** (file-explorer)
#3336 opened 3 days ago by `LianaHus`

Pull requests:



🔗 46 Open ✓ 1,693 Closed	Author ▾	Label ▾	Projects ▾	Milestones ▾	Reviews ▾	Assignee ▾	Sort ▾
<div>🔗 Nx ✓ bug</div> <div>#3344 opened yesterday by bunsenstraat • Review required</div>							 1
<div>🔗 fix sending tx with the api ✓ bugfix</div> <div>#3342 opened 2 days ago by yann300 • Review required</div>							 1
<div>🔗 Fix For Float Number In Value Field ✗</div> <div>#3339 opened 2 days ago by Patil2099 • Review required</div>					 1		 2

Issues , Labels


- **Unexpected behavior / bug:**
 - Reports of bugs and unexpected behavior that could be bugs.
- **Feature request / enhancement:**

Various types of improvement/enhancement to the project's code, documentation, comments, etc.

Label	Description
<code>bug</code>	Indicates an unexpected problem or unintended behavior
<code>documentation</code>	Indicates a need for improvements or additions to documentation
<code>duplicate</code>	Indicates similar issues, pull requests, or discussions
<code>enhancement</code>	Indicates new feature requests
<code>good first issue</code>	Indicates a good issue for first-time contributors
<code>help wanted</code>	Indicates that a maintainer wants help on an issue or pull request
<code>invalid</code>	Indicates that an issue, pull request, or discussion is no longer relevant
<code>question</code>	Indicates that an issue, pull request, or discussion needs more information
<code>wontfix</code>	Indicates that work won't continue on an issue, pull request, or discussion

Milestones:

You can use milestones to track progress on groups of issues or pull requests in a repository.

 **4 Open** ✓ **1 Closed**

Sort ▾

Remix-libs + Web2 Platforms

No due date


🕒 Last updated 16 days ago


60% complete


4 open


6 closed


Integrate remix-ide libs (remix-tests, static analysis, etc.) into Web2 platforms (yet to be fully identified)


 **4 Open** ✓ **6 Closed**


 **GitHub Action Helpers** ✓ **ready-for-review**
#3232 by ioedeveloper was merged 2 weeks ago • Approved


 **Add GitHub workflows to FE hamburger** ✓ **ready-for-review**
#3253 by ioedeveloper was merged 2 weeks ago • Approved **2 tasks done**


 **Fix resolver** ✓ **fix**
#3262 by ioedeveloper was merged on Jan 4 • Approved


 **Remix-Tests GitHub Action**
#2667 by ioedeveloper was closed on Sep 22, 2022


 **Exit process if error is found** • **fix**
#2734 by ioedeveloper was merged on Aug 9, 2022 • Approved


 **resolver for remix-tests CLI** • **ready-to-review** **remix-tests**
#2713 by Aniket-Engg was merged on Aug 2, 2022 • Approved

 **4 Open** ✓ **6 Closed**

 **Integrate remix-ide libs into Web2 platforms** **Roadmap2022**
#2666 opened on Jul 21, 2022 by ioedeveloper **3 tasks**

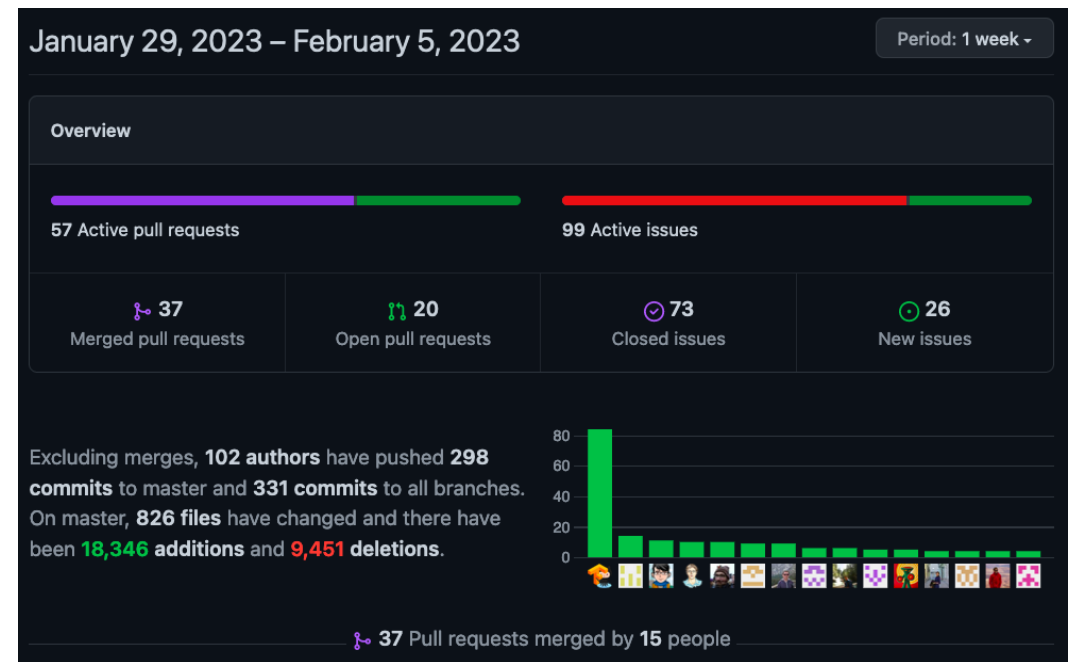
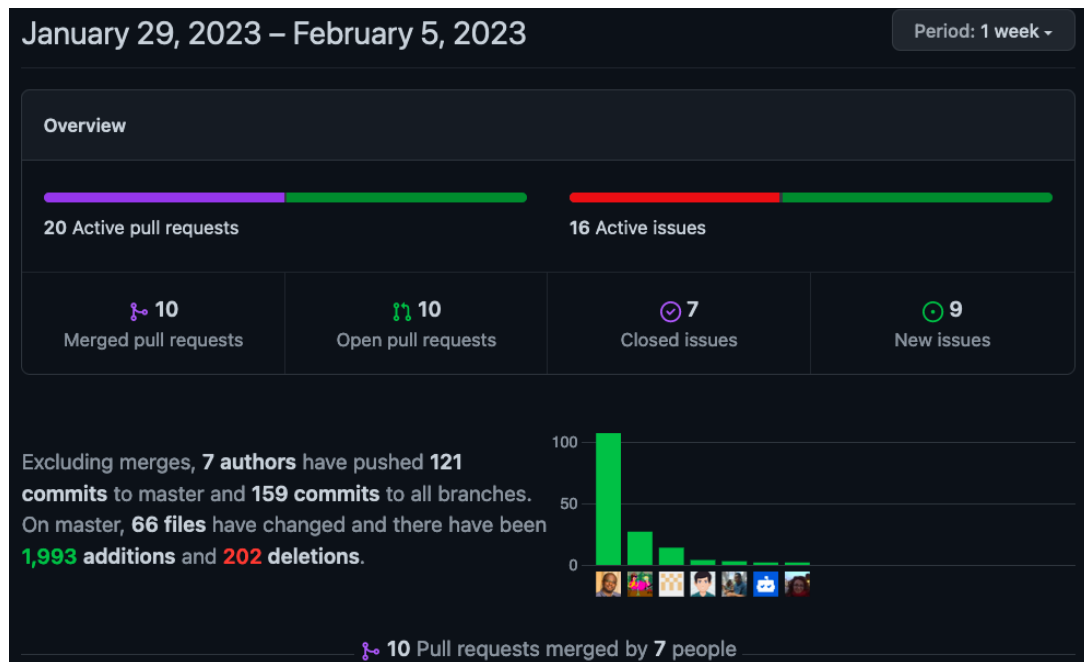
 **Static Analyzer + Slither GitHub Action**
#2883 opened on Sep 6, 2022 by ioedeveloper

 **Option for adding SUT github action workflow to repo**
#2884 opened on Sep 6, 2022 by ioedeveloper

 **Remix-Tests GitHub Action For Javascript and Typescript**
#3059 opened on Oct 31, 2022 by ioedeveloper

Assessment of the community

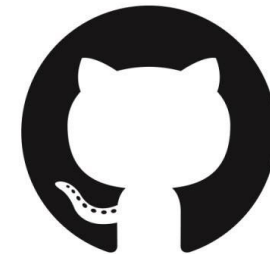
Remix VS TensorFlow:



GitHub is home to the largest open source community in the world, with millions of open source projects hosted on the web-based platform for working on software projects.

Thank you for your attention!

Any questions?



GitHub