

NAME	K.KAVIYA
ZONE	4
COLLEGE	GKM COLLEGE OF ENGINEERING AND TECHNOLOGY

1. GO TO THE CHROME ATFORM OPEN REMIX PLARTFORM

The screenshot shows the Remix IDE homepage. At the top, there's a navigation bar with icons for search, refresh, home, and exit. Below the header, the word "REMIX" is prominently displayed with a small blue character icon next to it. A sub-header reads "The Native IDE for Web3 Development." followed by links to "Website", "Documentation", "Remix Plugin", and "Remix Desktop". A search bar labeled "Search Documentation" is present. On the left, there's a sidebar titled "Files" with buttons for "New File", "Open File", and "Access File System". Below this is a "Load from" section with buttons for "GitHub", "Gist", "IPFS", and "HTTPS". A "Learn" section contains links to "Remix Basics", "Intro to Solidity", and "Deploying with Libraries", each with a "Get Started" button.

Featured

BETA TESTING
Our community supports us.
Help us beta test releases now and get a handle on new features!
[Sign up](#)

Get Started - Project Templates

- GNOsis Safe Multisig
Create Multi-Signature wallets using this template.
- OxProject ERC20
Create an ERC20 token by importing OxProject contract.
- OpenZeppelin ERC20
Create an ERC20 token by importing OpenZeppelin library.
- OpenZeppelin ERC721
Create an NFT token by importing OpenZeppelin library.

Featured Plugins

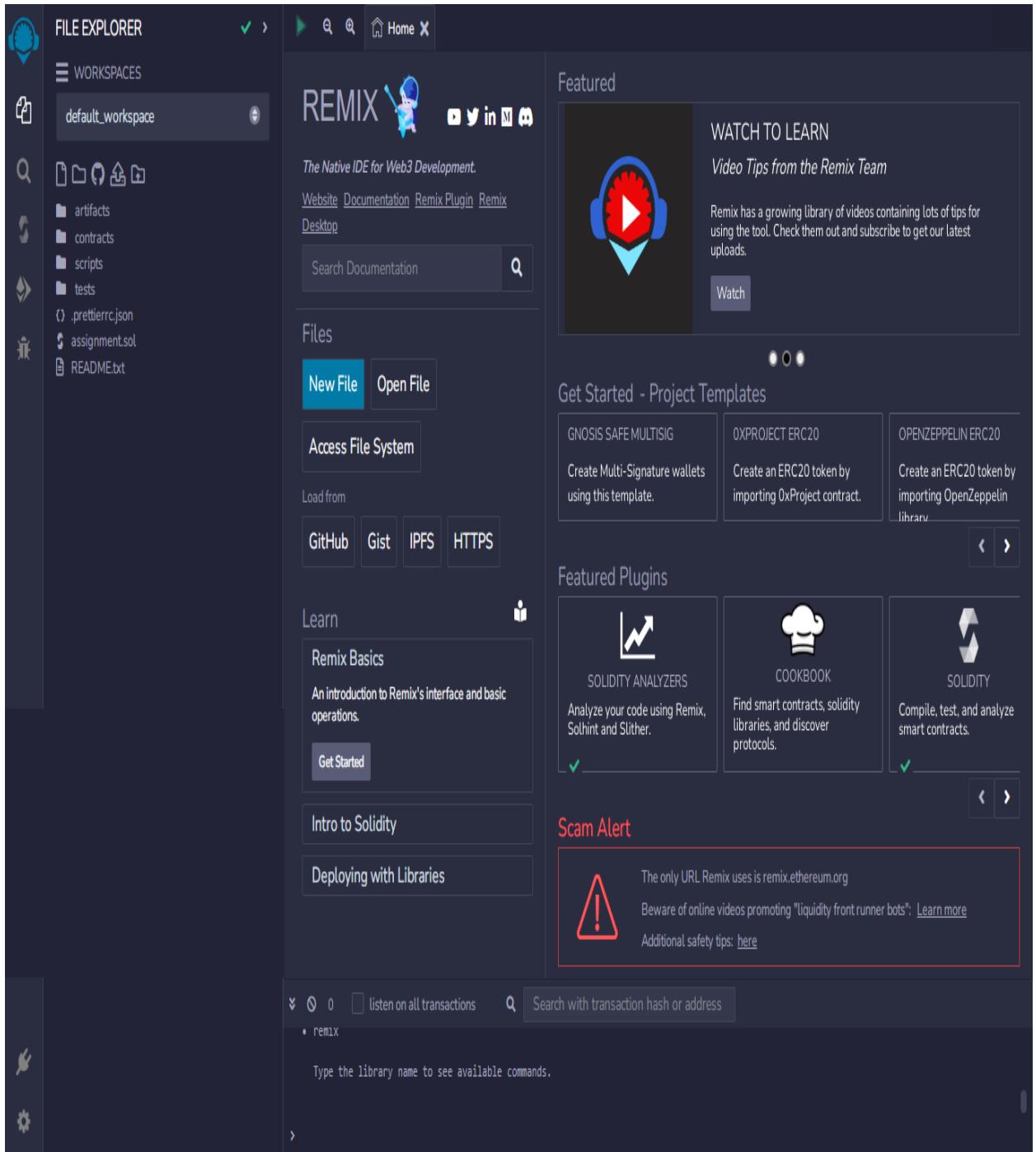
- Solidity Analyzers
Analyze your code using Remix, Solhint and Slither.
✓
- Cookbook
Find smart contracts, solidity libraries, and discover protocols.
✓
- Solidity
Compile, test, and analyze smart contracts.
✓
- Sourcify
Solidity contract and metadata verification service.
✓

Scam Alert

The only URL Remix uses is remix.ethereum.org
Beware of online videos promoting "liquidity front runner bots". [Learn more](#)
Additional safety tips: [here](#)

At the bottom, there's a footer with a transaction history (0 transactions), a search bar for "Search with transaction hash or address", and a command line interface (CLI) area. The CLI shows a command starting with "remix" and a placeholder "Type the library name to see available commands."

2. OPEN THE REMIX PAGE AND CREATE A NEW FILE



3. IN THE NEWLY CREATED FILE,CREATE A PROGRAM TO RETURN YOUR STRING ,”ZONE NAME”

The screenshot shows the Solidity Compiler interface within the Remix IDE. On the left, the compiler dropdown is set to version 0.8.18+commit.87f61d96. Below it are options for 'Include nightly builds', 'Auto compile', and 'Hide warnings'. A large blue button labeled 'Compile assignment.sol' is prominent. To its right, a smaller button says 'Compile and Run script'. Under the 'CONTRACT' section, 'ZoneNameContract (assignment.sol)' is selected. Below this are buttons for 'Publish on Ipfs' and 'Publish on Swarm'. Further down are 'Compilation Details' and ABI/Bytecode tabs. The main workspace displays the Solidity code for 'ZoneNameContract':

```
// SPDX-License-Identifier: MIT
pragma solidity ^0.8.0;

contract ZoneNameContract {
    function getZoneName() public pure returns (string memory) {
        return "Zone 4";
    }
}
```

The bottom half of the interface is the Remix terminal, showing the command line interface for interacting with the deployed contract.

4. SAVE THE PROGRAM AND COMPILE IT TO GET THE ABI AND BYTESCODE

ABI:

```
[  
 {  
   "inputs": [],  
   "name": "getZoneName",  
   "outputs": [  
     {  
       "internalType": "string",  
       "name": "",  
       "type": "string"  
     }  
   ],  
   "stateMutability": "pure",  
   "type": "function"  
 }  
 ]
```

BYTECODE:

5. FINALLY DEPLOY IT TO DISPLAY THE OUTPUT

The screenshot shows the Remix IDE interface with the following details:

- Deploy & Run Transactions** sidebar:
 - ENVIRONMENT: Remix VM (Shanghai)
 - ACCOUNT: 0x5B3...eddC4 (99.99999999999999 Wei)
 - GAS LIMIT: 300000
 - VALUE: 0 Wei
 - CONTRACT: ZoneNameContract - assignment.sol (evm version: paris)
 - Buttons: Deploy, Publish to IPFS
 - At Address: Load contract from Address
- assignment.sol** code editor:

```
// SPDX-License-Identifier: MIT
pragma solidity ^0.8.0;

contract ZoneNameContract {
    function getZoneName() public pure returns (string memory) {
        infinite gas
        return "Zone 4";
    }
}
```
- Transactions recorded**: 1 transaction listed.
- Deployed Contracts**:
 - ZONENAMECONTRACT AT 0xD91...
- Contract Details for ZONENAMECONTRACT AT 0xD91...**:
 - Balance: 0 ETH
 - getZoneName button (highlighted)
 - Output: 0: string: Zone 4
 - Low level interactions: CALldata, Transact button
- Logs**: 1 log entry: call [call] from: 0x5B380a6a701c568545dCfcB03FcB875f56beddC4 to: ZoneNameContract.getZoneName() data: 0x235...ed70f
- Search**: Search with transaction hash or address
- Debug** button