Internship Report Blockchain & Crypto Internship

Task 02: Create and Deploy an ERC-20 Token on Polygon Amoy(

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Intern at Future Interns

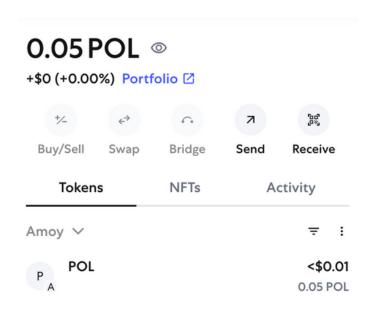
Date: June 26, 2025



Task Overview:

The goal of Task 02 was to create a custom ERC-20 token using Solidity and deploy it on a public blockchain testnet. Due to the deprecation of the Polygon Mumbai Testnet, this task was completed using the upgraded and actively supported Polygon Amoy Testnet. The token was written in Solidity, compiled and deployed using Remix IDE, and verified via MetaMask and the Amoy explorer.

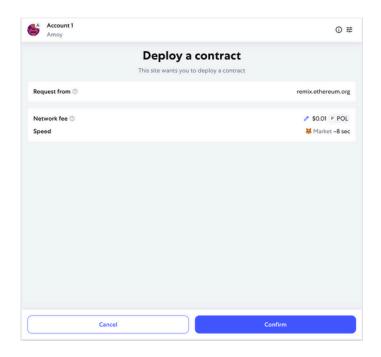
Step 1: Setup MetaMask with Amoy Testnet and Fund with 0.05 POL



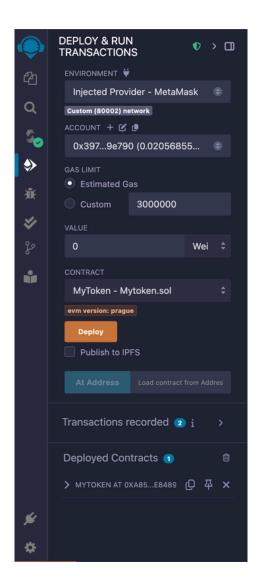
Step 2: Write the ERC-20 Token Smart Contract in Remix

```
FILE EXPLORER
                                  🏗 🚇 🔼 🗨 Home
                                                        $ Mytoken.sol X
    ■ WORKSPACES
                      Sign in
4
     default_workspace
    contract MyToken is ERC20 {
                                      .deps
      github
$>
       @openzeppelin
        contracts
ŵ
        interfaces
*
          ERC20
            S IERC20Metadata.sol
ů
           S IERC20.sol
        utils
    artifacts
    contracts
```

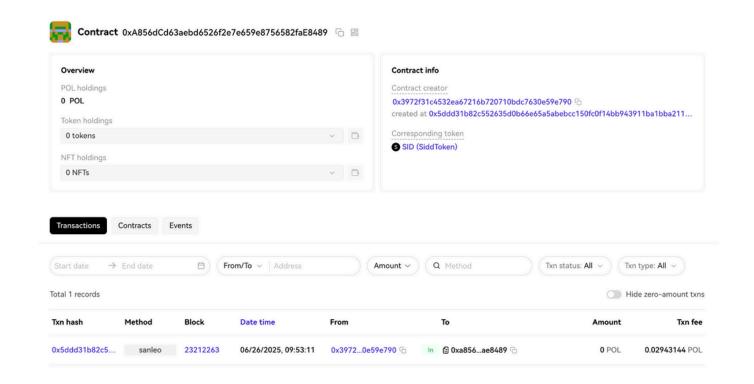
Step 3: Confirm Contract Deployment via MetaMask on Polygon Amoy



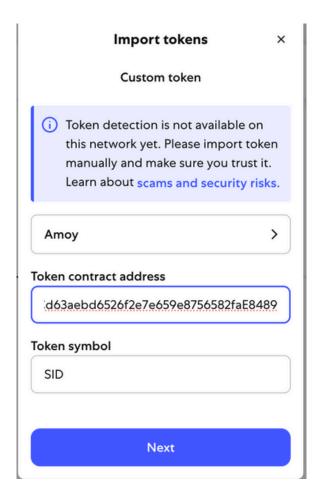
Step 4: Use Remix's Injected Web3 to Deploy Contract to Amoy



Step 5: View Deployed Contract on Amoy Block Explorer



Step 6: Manually Import the Token into MetaMask



Step 7: Verify Token is Added with Correct Balance

SID \$0.00 S A 1,000,000 SID Token details Network A Amoy Contract address Token decimal Copy to clipboard 8 Spending caps Edit in Portfolio

Solidity Code:

```
// SPDX-License-Identifier: MIT
pragma solidity ^0.8.0;
import "@openzeppelin/contracts/token/ERC20/ERC20.sol";
contract MyToken is ERC20 {
   constructor() ERC20("SiddToken", "SID") {
     _mint(msg.sender, 1000000 * 10 ** decimals());
   }
}
```

E Learnings

- Mastered ERC-20 token deployment via OpenZeppelin and Remix IDE.
- **Understood MetaMask interaction with custom networks.**
- **Became aware of Polygon Mumbai deprecation and Amoy migration.**
- **Gained confidence working with smart contracts and testnets.**