

WORKSHOP
**DO ZERO
AO DEPLOY**



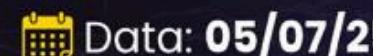
Construindo Tokens e
NFTs no Ethereum

- Entenda o que são Tokens e NFTs
- Crie ativos digitais na rede Ethereum
- Teste e implante seus contratos na prática

Descubra como desenvolver seus próprios Tokens e **NFTs** na blockchain **Ethereum**, mesmo sem experiência prévia!



PUC Minas Coração Eucarístico



Data: **05/07/25** Horário: **14h às 17h**
(Sábado)



Av. Dom José Gaspar, 500
Coração Eucarístico
Prédio: **34** | Laboratório: 08

O futuro é descentralizado.
Dê o primeiro passo agora!

**JUAN
COLCHETE**

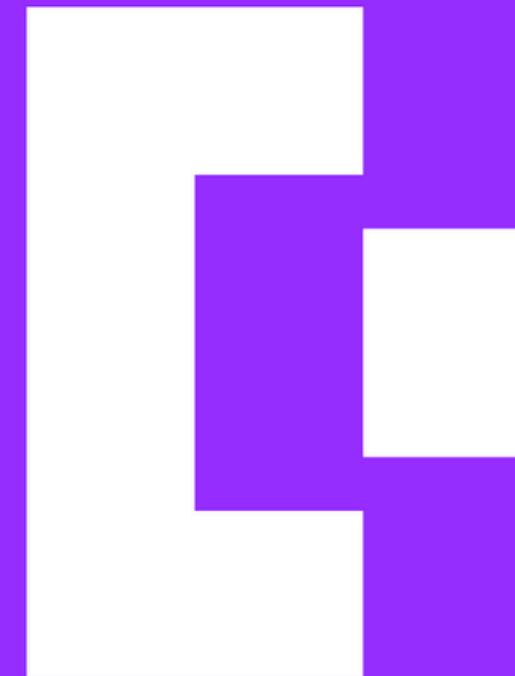
Desenvolvedor Blockchain
Co Fundador UAIBIT

**CLÁUDIO
AUGUSTO**

Instrutor do WebTech
Aluno da PUC Minas



ColcheteDAO



C

Livecoins



E

Bitcoin Only



WaveSend



UAIBIT



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PUC Minas



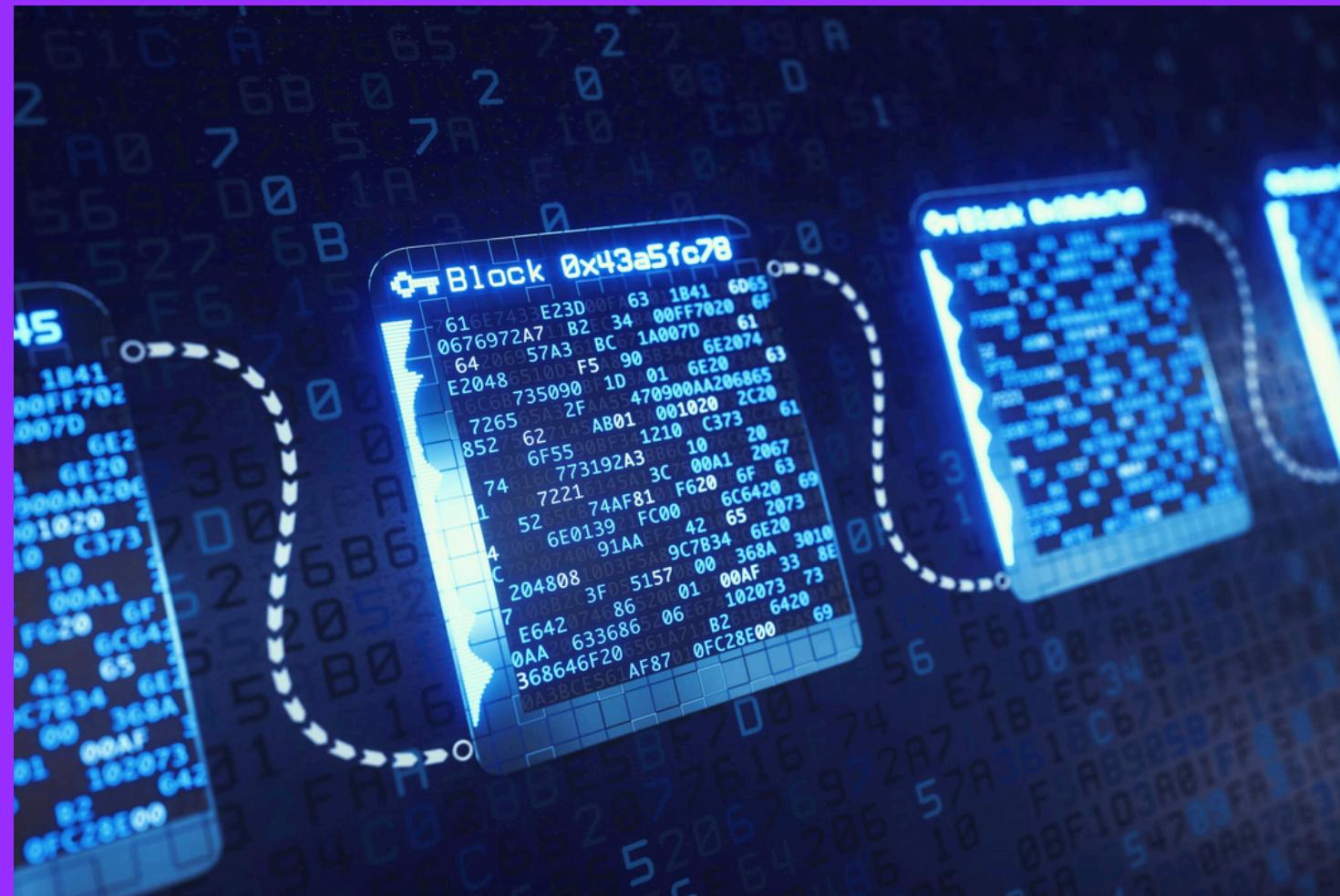
E

WebTech



E

O que é uma blockchain?



E

O que é EVM?

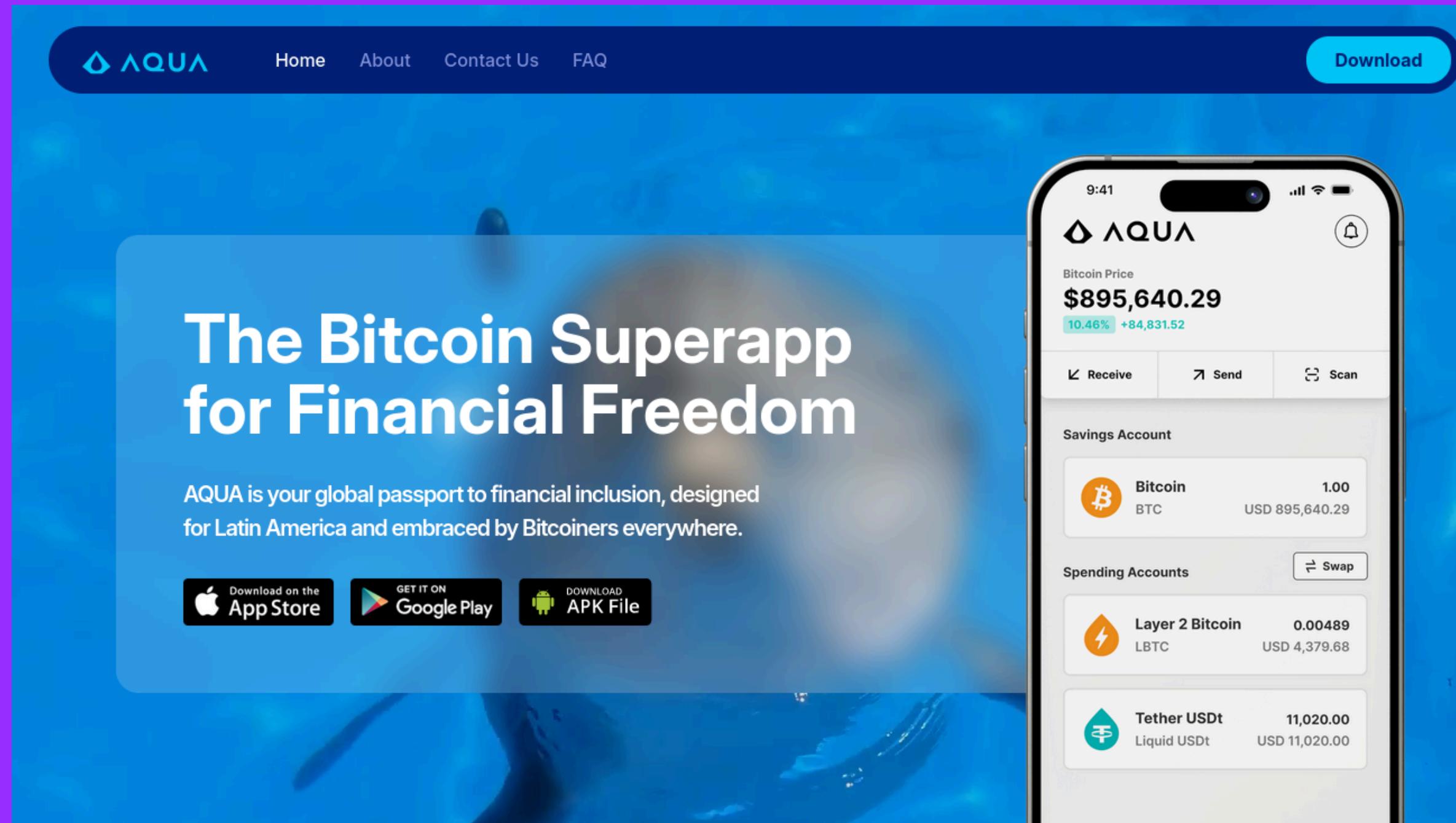


O que é um token?



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Transformar USDT em BTC



The image shows the AQUA Superapp website and its mobile application interface. The website features a blue header with the AQUA logo, navigation links for Home, About, Contact Us, FAQ, and a prominent 'Download' button. The main content area has a blurred background of a person swimming underwater. It displays the text 'The Bitcoin Superapp for Financial Freedom' and a subtitle: 'AQUA is your global passport to financial inclusion, designed for Latin America and embraced by Bitcoiners everywhere.' Below this are download links for the App Store, Google Play, and APK File. To the right, a smartphone screen shows the AQUA mobile app's home screen. The app's header shows the time (9:41), battery level, signal strength, and a notification bell. The main display shows the 'Bitcoin Price' at '\$895,640.29' (10.46% +84,831.52). Below this are three tabs: 'Receive', 'Send', and 'Scan'. Under 'Savings Account', there is a card for 'Bitcoin' (BTC) with 1.00 unit worth USD 895,640.29. Under 'Spending Accounts', there are cards for 'Layer 2 Bitcoin' (LBTC) with 0.00489 units worth USD 4,379.68, and 'Tether USDT' (Liquid USDT) with 11,020.00 units worth USD 11,020.00. A 'Swap' button is also visible between the two account sections.

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O que é uma NFT?

Pudgy Penguin #4703

Pudgy Penguins | Owned by 0x2946...a20b

ERC721 | ETHEREUM | TOKEN #4703

TOP OFFER	COLLECTION FLOOR	RARITY	LAST SALE
9.25 WETH	9.5297 ETH	#631	24.45 BETH

BUY FOR
9.5297 ETH (\$23.8K) ENDING IN 15 MINUTES

Buy now Make offer

Details Orders Activity

♦ Traits

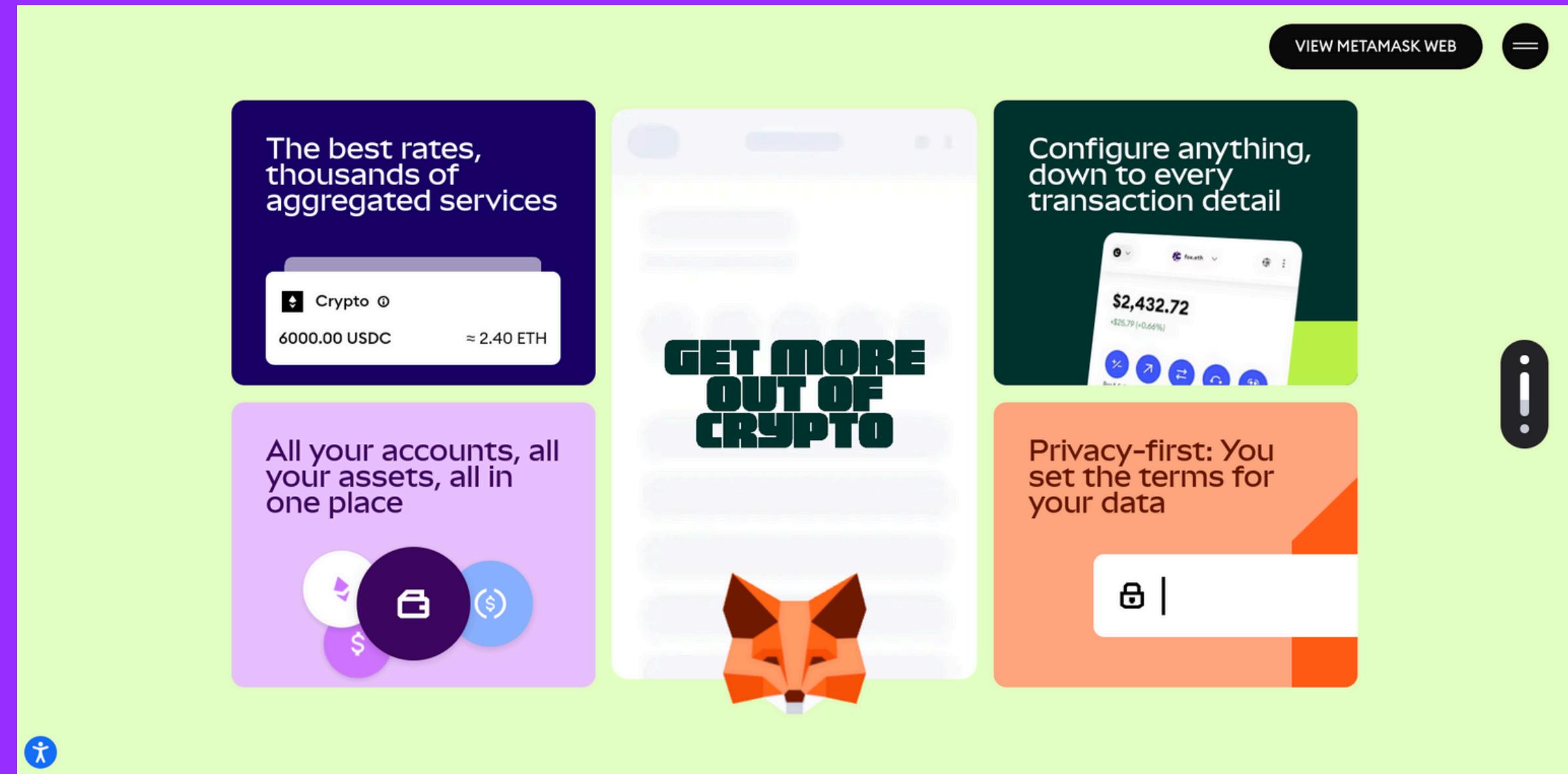
TRAITS 5

BACKGROUND	SKIN	BODY
Pink	Mint	Surfboard Necklace
710 8%	423 5%	166 2%
9.5297 ETH	9.5297 ETH	9.5297 ETH

FACE	HEAD
Handlebar Bear	Flat Cap Black
259 3%	247 3%
9.5297 ETH	9.5297 ETH

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Metamask



Open Zeppelin Wizard



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Open Zeppelin Wizard ERC20

The screenshot shows the OpenZeppelin Wizard interface for creating an ERC20 token. The top navigation bar includes the OpenZeppelin logo, Forum, Docs, and social media links for GitHub and X. Below the navigation, tabs for Solidity, Cairo, Stellar, and Stylus are shown, with Solidity selected. The main interface is for the ERC20 template, with other options like ERC721, ERC1155, Stablecoin*, Real-World Asset*, Account*, Governor, and Custom available.

SETTINGS

- Name: MyToken
- Symbol: MTK
- Premint: 0

FEATURES

- Mintable
- Burnable
- Pausable
- Callback
- Permit
- Flash Minting

VOTES

CROSS-CHAIN BRIDGING*

ACCESS CONTROL

UPGRADEABILITY

INFO

Security Contact: security@example.com

License: MIT

The central area displays the generated Solidity code:

```
// SPDX-License-Identifier: MIT
// Compatible with OpenZeppelin Contracts ^5.0.0
pragma solidity ^0.8.27;

import {ERC20} from "@openzeppelin/contracts/token/ERC20/ERC20.sol";
import {ERC20Permit} from "@openzeppelin/contracts/token/ERC20/extensions/ERC20Permit.sol";

contract MyToken is ERC20, ERC20Permit {
    constructor() ERC20("MyToken", "MTK") ERC20Permit("MyToken") {}
}
```

Buttons at the bottom right include a Deploy button and an AI Assistant icon.

Open Zeppelin Wizard ERC721

The screenshot shows the OpenZeppelin Wizard interface for creating an ERC721 token. The top navigation bar includes links for Forum, Docs, and social media icons. Below the navigation, tabs for Solidity, Cairo, Stellar, and Stylus are shown, with Solidity selected. A sub-navigation bar at the top of the main area includes tabs for ERC20, ERC721 (selected), ERC1155, Stablecoin*, Real-World Asset*, Account*, Governor, and Custom. On the right side of this bar are buttons for Copy, Open in Remix, and Download.

The main workspace is a dark-themed code editor containing the Solidity source code for the token contract:

```
// SPDX-License-Identifier: MIT
// Compatible with OpenZeppelin Contracts ^5.0.0
pragma solidity ^0.8.27;

import {ERC721} from "@openzeppelin/contracts/token/ERC721/ERC721.sol";

contract MyToken is ERC721 {
    constructor() ERC721("MyToken", "MTK") {}
}
```

To the left of the code editor is a sidebar with several sections:

- SETTINGS**: Fields for Name (MyToken) and Symbol (MTK), and a Base URI input field containing <https://...>.
- FEATURES**: A list of checkboxes for Mintable, Auto Increment Ids, Burnable, Pausable, Enumerable, and URI Storage.
- VOTES**: A section with a checkbox and a link.
- ACCESS CONTROL**: A section with a checkbox and a link.
- UPGRADEABILITY**: A section with a checkbox and a link.
- INFO**: Fields for Security Contact (security@example.com) and License (MIT).

On the right side of the sidebar are buttons for « Deploy and AI Assistant.

At the bottom of the page, a footer bar includes the copyright notice © OpenZeppelin 2017-2025 | Privacy | Terms of Service.

Open Zeppelin Wizard ERC1155

The screenshot shows the OpenZeppelin Wizard interface for creating a new contract. The top navigation bar includes links for Forum, Docs, and social media icons. Below the navigation, tabs for Solidity, Cairo, Stellar, and Stylus are shown, with Solidity selected. The main navigation menu at the top has categories: ERC20, ERC721, ERC1155 (which is selected), Stablecoin*, Real-World Asset*, Account*, Governor, and Custom. On the right, there are buttons for Copy, Open in Remix, and Download.

The left sidebar contains configuration sections:

- SETTINGS**: Name is set to "MyToken" and URI is set to "https://...".
- FEATURES**: Options include Mintable, Burnable, Supply Tracking, Pausable, and Updatable URI (which is checked).
- ACCESS CONTROL**: Set to "Ownable" (radio button is selected).
- UPGRADEABILITY**: Unchecked.
- INFO**: Security Contact is listed as "security@example.com" and License is listed as "MIT".

The central area displays the Solidity code generated for the contract:

```
// SPDX-License-Identifier: MIT
// Compatible with OpenZeppelin Contracts ^5.0.0
pragma solidity ^0.8.27;

import {ERC1155} from "@openzeppelin/contracts/token/ERC1155/ERC1155.sol";
import {Ownable} from "@openzeppelin/contracts/access/Ownable.sol";

contract MyToken is ERC1155, Ownable {
    constructor(address initialOwner) ERC1155("") Ownable(initialOwner) {}

    function setURI(string memory newuri) public onlyOwner {
        _setURI(newuri);
    }
}
```

On the right side of the code editor, there are buttons for "Deploy" and "AI Assistant". At the bottom, there is a footer with the text "© OpenZeppelin 2017-2025 | Privacy | Terms of Service".

Open Zeppelin Wizard Custom

The screenshot shows the OpenZeppelin Wizard interface for creating a custom Solidity contract. The main area displays the Solidity code for a basic contract named `MyContract`:

```
// SPDX-License-Identifier: MIT
// Compatible with OpenZeppelin Contracts ^5.0.0
pragma solidity ^0.8.27;

contract MyContract {
```

The left sidebar contains the following configuration fields:

- SETTINGS**:
 - Name: MyContract
- FEATURES**:
 - Pausable
 - ACCESS CONTROL
 - UPGRADEABILITY
- INFO**:
 - Security Contact: security@example.com
 - License: MIT

At the bottom right of the main area is a purple "Deploy" button. At the bottom center is an "AI Assistant" button. The top navigation bar includes links for Forum, Docs, and social media icons for GitHub and X. The top tabs allow selecting different contract types: ERC20, ERC721, ERC1155, Stablecoin*, Real-World Asset*, Account*, Governor, and Custom (which is selected).

Remix Ethereum

The screenshot shows the Remix Ethereum IDE interface. The central area is a code editor displaying a Solidity contract named `contract-cf4f402bd8.sol`. The code imports several OpenZeppelin contracts and defines a new contract `ZeroProd` that inherits from `ERC20` and `ERC20Burnable`. It includes a constructor that initializes the token name and symbol, and a `_mint` function that mints tokens to a recipient.

```
// SPDX-License-Identifier: MIT
// Compatible with OpenZeppelin Contracts ^5.0.0
pragma solidity ^0.8.27;

import {ERC20} from "@openzeppelin/contracts@5.3.0/token/ERC20/ERC20.sol";
import {ERC20Burnable} from "@openzeppelin/contracts@5.3.0/token/ERC20/extensions/ERC20Burnable.sol";
import {ERC20Permit} from "@openzeppelin/contracts@5.3.0/token/ERC20/extensions/ERC20Permit.sol";

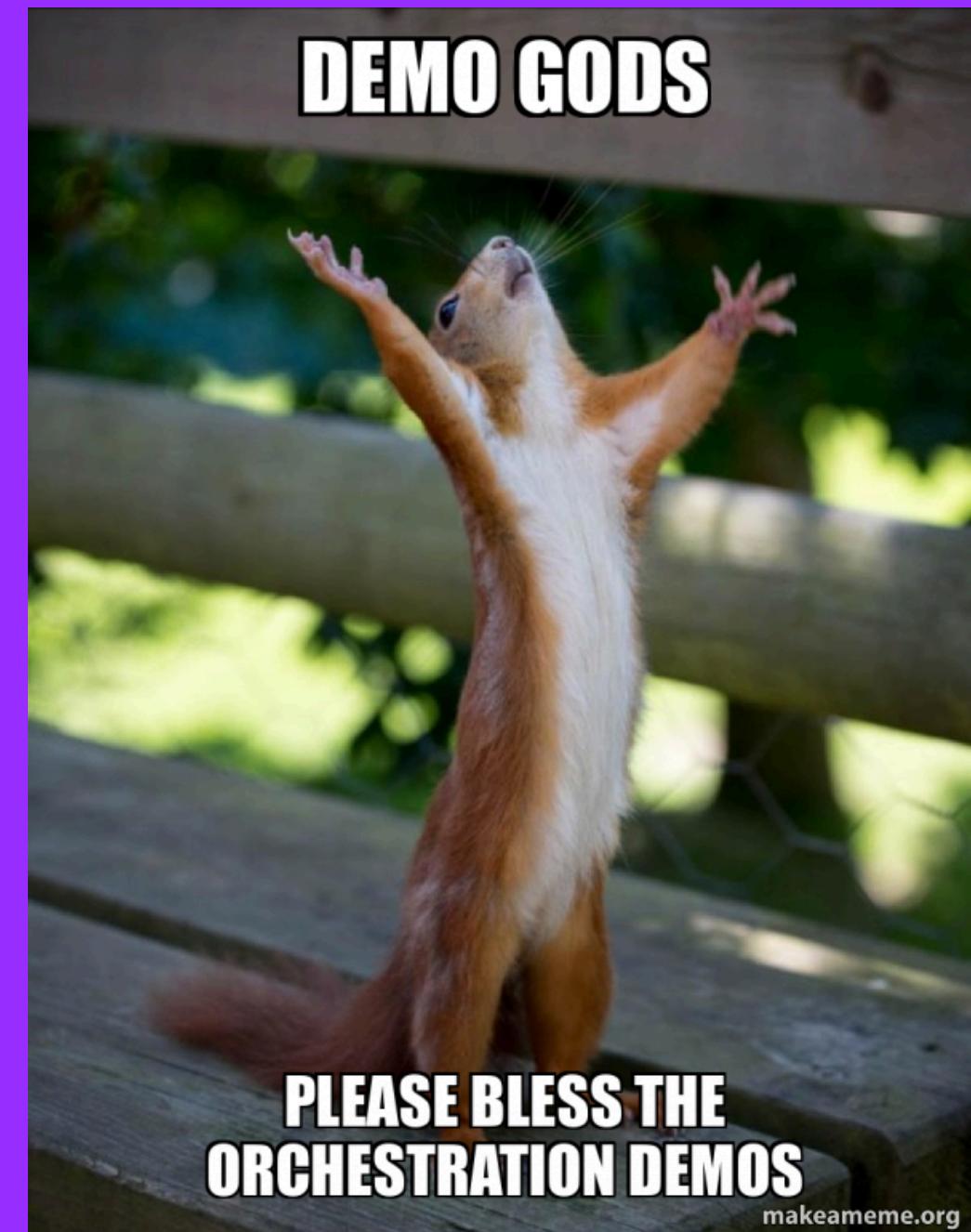
contract ZeroProd is ERC20, ERC20Burnable {
    constructor(address recipient) BinaryOperation(
        ERC20("ZeroProd", "ZPRD"),
        ERC20Permit("ZeroProd")
    ) {
        _mint(recipient, 1000000 * 10 ** decimals());
    }
}
```

The left sidebar contains a file explorer showing the project structure, including the `code-sample` workspace and various OpenZeppelin dependency folders like `@openzeppelin/contracts@5.3.0` and `utils`.

The bottom right corner features a small circular icon for "RemixAI Copilot (enabled)".

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Demo time



DEMO GODS

**PLEASE BLESS THE
ORCHESTRATION DEMOS**

makeameme.org

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Bitcoin Only.



Obrigado



juancolchete.com.br
t.me/colchetep2p