Ergohack #9

3d explorer

Explore blockchain data in a
dynamic, immersive 3D space

1. MOTIVATION

- ## Intuitive Understanding

  By visualizing complex UTXO data in 3D, my goal is to make blockchain concepts more accessible, playful, and educational.

- ## Unique Approach

  A 3D environment offers a distinct, engaging way to grasp blockchain interactions and visualize connections within UTXO-based systems.

2. GOALS

- **Interactive 3D Visualizer**

  Develop a site that displays blocks, transactions, inputs, outputs, assets, and addresses in real time.

- **Enable In-Depth Exploration**

  Allow users to zoom in on transactions and navigate previous blocks for detailed insights.

- **Educational Interface**

  Serve as an educational tool to demystify the UTXO model and enhance understanding of blockchain's structural nuances.

3. CURRENT PROGRESS

- **Data Integration**

  Successfully integrated real-time data fetching from the Ergo blockchain.

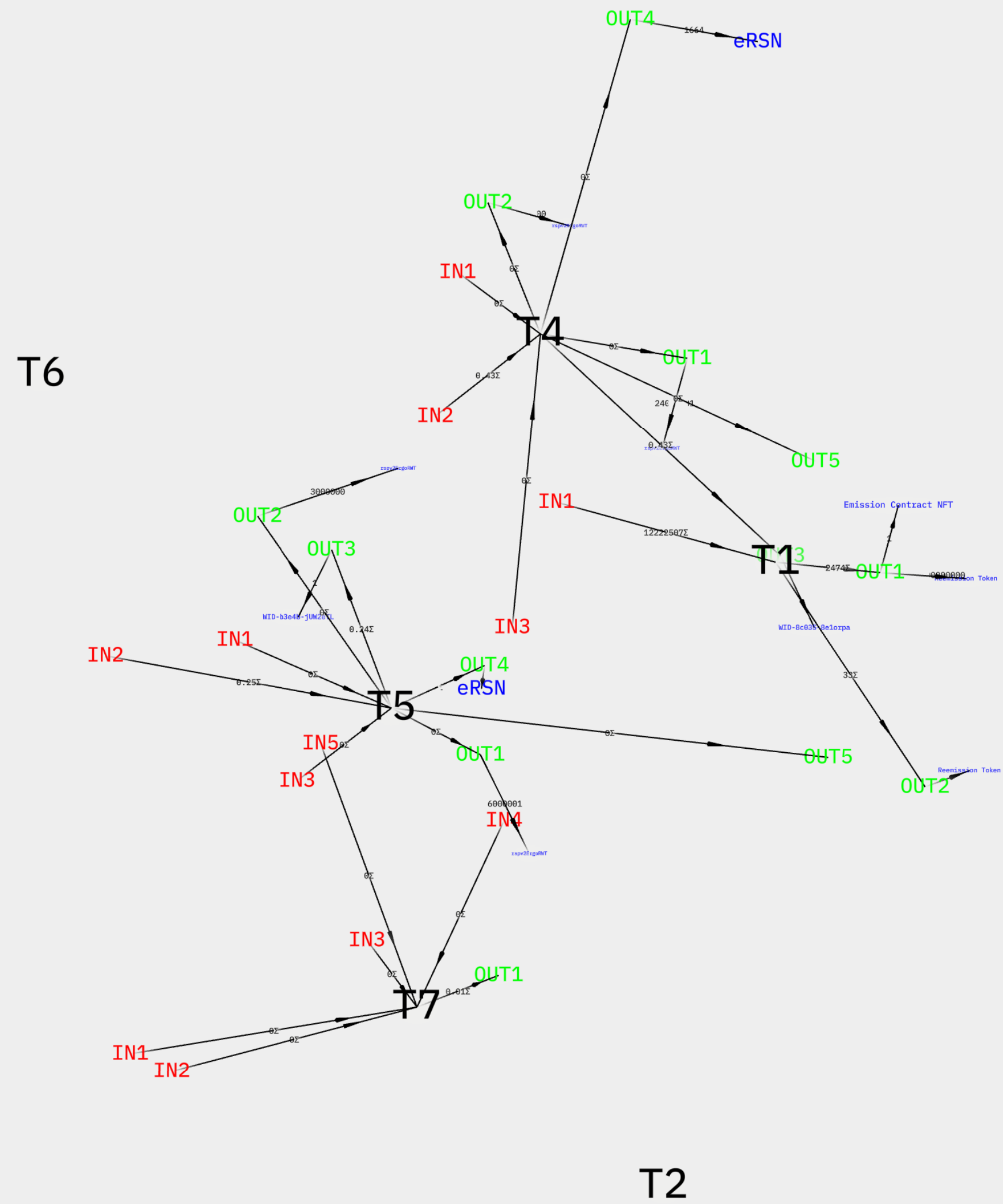- **Basic Search Capabilities**

  Implemented a foundational search for assets, addresses, and blocks.

- **3D Visualization**

  Achieved dynamic 3D rendering of blocks, transactions, and connections between them.

- **Interactive 2D & 3D Interface**

  Built a 2D layer that supports the 3D view, aiding in user navigation and interaction with the data.

4. FUTURE STEPS

- **Improved Search**

  Expand search options for e.g. addresses, solo tranactions etc.

- **User Wallet Exploration**

  Add a feature for users to locate and explore their wallet's transactions in 3D space.

- **Mobile Compatibility**

  Develop a mobile-friendly version for better accessibility.

- **Unified 2D and 3D Integration**

  Standardize references to ensure a seamless flow between 2D and 3D views.

- **Custom Domain & Branding**

  Host the project on a dedicated domain and establish a cohesive "identity".

- **Community Suggestions**

  Share your thoughts and ideas for this project.

5. VIDEO AND DEMO

- <u>Video Url</u>

  https://youtu.be/uspsmPDSqgw

- <u>Demo Url</u>

  https://ergo-3d-explorer.vercel.app/

Thank you! for taking the time to explore this project