## **Ideas and Proposed Features**

- 1. RESEARCH built-in bitcoind caching, multithread, etc.
- 2. OMNICORE pull request for Get Balances for property with height/hash
- 3. Cache architecture
  - a. Unified architecture
    - i. Supporting serving via JSON-RPC, REST, WebSockets, ZeroMQ?, RSocket?
    - ii. Gets data from bitcoind via JSON-RPC, ZeroMQ (and REST?)
    - iii. Supports plugins for Omni, Analytics, etc.
  - b. JSON-RPC Features
    - i. Caching based upon ChainTip (best block)
    - ii. Caching for non-ChainTip based data?
    - iii. Caching 0-argument calls
    - iv. Caching 1-argument calls
      - A. Address
      - B. TxID
      - C. BlockHash
      - D. BlockCount
- 4. Integration with and/or use of popular libraries
  - a. Micronaut Cache
    - i. External Caches
  - b. Micronaut Rate-limiter
  - c. RxJava3
  - d. resilience4j (vavr)
  - e. Micronaut ACME (for certs)
- 5. Tor Hidden Service
  - a. Canary UTXO
- 6. Payment Channel based Micropayments
- 7. How tied to Micronaut do we want to be
  - a. What can go in library without Micronaut Dependency?
- 8. Is there a JSON-RPC only version? (e.g. not Bitcoin or blocks?)
- 9. Components that can be integrated with a bitcoinj-based server implementation
- 10. JDK 11 until Graal supports JDK 17
- 11. Docker flavors:

- a. Hotspot
  - i. x64
  - ii. ARM64
- b. Graal Native-Image
  - i. x64
  - ii. ARM64