

1. Most Viewed Stocks

Data Structure: Sorted Set

- Usage: Use a Redis sorted set to maintain a ranking of the most viewed stocks. The sorted set will have the stock IDs as members with the number of views as the score.
- Key Example: "mostViewedStocks"
- Operations: Increment the score whenever a stock is viewed with `ZINCRBY mostViewedStocks 1 stockID`. Retrieve the top N most viewed stocks with `ZREVRANGE mostViewedStocks 0 N-1 WITHSCORES`.

2. Current Logged-In Users

Data Structure: Hash

- Usage: Use Redis hashes to store session data for each logged-in user. The hash can store various session attributes like last access time, user preferences, and temporary data like current navigation state.
- Key Example: "session:userId"
- Operations: Set session data with `HSET session:userId field value` and retrieve with `HGETALL session:userId`.

3. Recent Transactions Cache

Data Structure: List

- Usage: Redis lists are ideal for storing sequences of transactions because they allow you to push new transactions at one end and pop old transactions from the other end if needed.
- Key Example: "recentTransactions"
- Operations: Push new transactions with `LPUSH recentTransactions transactionData` and trim the list to the most recent N items with `LTRIM recentTransactions 0 N-1`.

4. Insight and Analysis

Data Structure: Hash

- Usage: For each market insight, use a hash to store various attributes like stock ID, source ID, description, and so forth. This allows quick, structured access to the properties of each insight.
- Key Example: "marketInsight:insightId"
- Operations: Store insights with HMSET marketInsight:insightId field value and retrieve with HGETALL marketInsight:insightId.

5. Political Figures' Recent Activities

Data Structure: Sorted Set

- Usage: Use sorted sets to rank political figures based on the recency of their activities or the impact of their actions. You could score them by the timestamp of their latest activity or by a custom 'impact score' determined by their actions' significance.
- Key Example: "politicalActivities"
- Operations: Add or update activities with ZADD politicalActivities timestamp politicalFigureId.