

### **User Sessions:**

Initialize: FLUSHALL

Create a new user session: HSET userSession:{sessionId} userID {userID} lastAction {timestamp}

Read a user session: HGETALL userSession:{sessionId}

Update last action in user session: HSET userSession:{sessionId} lastAction {newTimestamp}

Delete a user session: DEL userSession:{sessionId}

### **Recent Stock Quotes:**

Create or update a stock quote: HMSET stockQuote:{tickerSymbol} price {price} lastUpdate {timestamp}

Read a stock quote: HGETALL stockQuote:{tickerSymbol}

Delete a stock quote: DEL stockQuote:{tickerSymbol}

### **User Portfolio Snapshots:**

Create or update a portfolio snapshot: HMSET portfolioSnapshot:{userID} portfolioID {portfolioID} totalValue {totalValue} performance {performanceMetrics}

Read a portfolio snapshot: HGETALL portfolioSnapshot:{userID}

Delete a portfolio snapshot: DEL portfolioSnapshot:{userID}

### **Pending Transactions:**

Add a new transaction to the queue: RPUSH pendingTransactions:{portfolioID} {transactionID}

Process the next transaction: LPOP pendingTransactions:{portfolioID}

Read all pending transactions for a portfolio: LRANGE pendingTransactions:{portfolioID} 0 -1

Delete all pending transactions for a portfolio: DEL pendingTransactions:{portfolioID}

### **Leaderboard of Users by Portfolio Value:**

Add or update a user's portfolio value: ZADD leaderboard {portfolioValue} {userID}

Retrieve top 10 users: ZREVRANGE leaderboard 0 9

Remove a user from the leaderboard: ZREM leaderboard {userID}

Increment a user's portfolio value: ZINCRBY leaderboard {incrementValue} {userID}

### **Tweets Per User:**

Add a new tweet for a user: LPUSH userTweets:{screenName} {tweetID}

Create or update a tweet's information: HMSET tweet:{tweetID} user\_name {userName} text {text} created\_at {createdAt}

Retrieve all tweets for a user: LRANGE userTweets:{screenName} 0 -1

Retrieve information for a specific tweet: HGETALL tweet:{tweetID}

Remove a tweet from a user's list: LREM userTweets:{screenName} 0 {tweetID}

Delete a tweet's information: DEL tweet:{tweetID}