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## **Last Part on Go**

## **Answer some questions**

1. J.P.Morgan Chase (JPM Coin) for B2B money movement. https://decryptmedia.com/5173/jp-morgan-coin-cryptocurrency

2.

## **Transactions in Blockchain**

Data Structure from ./bsvr/block/block.go:

```
// BlockType is a single block in the block chain.
type BlockType struct {
  Index
                int
                                                 // position of this
                                                 // block in the
                                                 // chain, 0, 1, ...
  Desc
                string
                                                 // if "genesis" str.
                                                 // then this is a
                                                 // genesis block.
  ThisBlockHash hash.BlockHashType
  PrevBlockHash hash.BlockHashType
                                                 // This is 0 len.
                                                 // if this is a
                                                 // "genesis" block
  Nonce
                uint64
                                                 //
  Seal
                hash.SealType
                                                 //
  MerkleHash
                hash.MerkleHashType
                                                 // Hw 03
                []*transactions.TransactionType // Tx for Block
  Tx
}
```

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Data Structure from ./bsvr/transactions/tx.go:

```
type TransactionType struct {
  Tx0ffset
                 int
                                   // The pos. of this in the block.
  Input
                 []TxInputType
                                   // Set of inputs to a transaction
  Output
                 []Tx0utputType
                                   // Set of outputs to a tranaction
  SCOwnerAccount addr.AddressType
                                   // ... for SmartContracts ...
                                   // ... for SmartContracts ...
  SCAddress
                 addr.AddressType
  SCOutputData
                                    // ... for SmartContracts ...
                 string
  Account
                 addr.AddressType
                                   //
  Signature
                 lib.SignatureType // Used in HW 5 - Signature
                                       Used in HW 5 - Message
  Message
                                   //
                 string
  Comment
                 string
                                   //
}
type TxInputType struct {
              int // Which block is this from
  BlockNo
  Tx0ffset
              int // The transaction in the block.
                  // In the block[BlockHash].Tx[Tx0ffset]
  TxOutputPos int // Position of the output in the transaction.
                  // In the block[BlockHash].Tx[Tx0ffset].
                  // Output[TxOutptuPos]
  Amount
              int // Value $$
}
type TxOutputType struct {
  BlockNo
              int
                               // Which block is this in
                               // Which transaction in this block.
  Tx0ffset
              int
                               // block[this].Tx[Tx0ffset]
                               // Pos. of the output in this block.
  TxOutputPos int
                               // In the block[this].Tx[Tx0ffset].
                               // Output[TxOutptuPos]
              addr.AddressType // Acctount funds go to (If this is
  Account
                               // ""chagne"" then this is the same
                               // as TransactionType.Account
  Amount
              int
                               // Amoutn to go to accoutn
}
```