CHAPTER-2

**BLOCKCHAIN**

**What is blockchain?**

**Blockchains are secure by design and are an example of a distributed computing system withhigh Byzantine fault tolerance. Decentralized consensus has therefore been achieved with a blockchain. It solves the double spending problem without the need of a trustedauthority or central server.**

**As long as a transaction is unconfirmed, it is pending and can be forged. When a transaction is**

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**part of an immutable**

**record of historical transactions: of the so-called blockchain.**

**Why do we need blockchain?**

**Features of blockchain:**

**1) The validity of each cryptocurrency's coins is provided by a blockchain.**

**2) A blockchain is a continuously growing list of records, called blocks, which are linked and**

**secured using cryptography. Each block typically contains a hash pointer as a link to a previous**

**block, a timestamp and transaction data.**

**3) By design, blockchains are inherently resistant to modification of the data. It is "an**

**open, distributed ledger that can record transactions between two parties efficiently and in a**