EER Diagram (Description and Analysis)

Entity:

- User
- Support
- User_Login
- Deposit
- Transaction
- Investment
- Plans
- Compounds

Entity (Description):

- User - A user in this system, represents traders who participate in the trading of cryptocurrency.

- Support - Support represents customer support/Complaints/Inquiries/etc.

- User_Login - User Login represents the recorded data of trader's identity, location and the details of the device from which he/she logged in.

- Deposit - Deposits can be interchanged with the term 'wallet', where traders can store cryptocurrency, and view exchange rates.

- Transactions - Transactions in cryptocurrency databases operate through two keys, (public key and private key). The public key is known to public traders and the private keys are known to individual traders. To confirm a transaction, both keys must be cross-referenced and be termed valid.

- Investments - The traders will purchase plans to calculate their profits or losses based on their investment.

- Plans - Like general banks, that provide a certain return on investment during maturity, this entity will also showcase such facilities which will provide a return on investment for the cryptocurrency invested.

- Compounds - Compounds are the amount of increase in the cryptocurrency market based on exchange rate fluctuations.

Attributes (Under Entities)

- Users:
    - id (PK)
    - name
    - username
    - email
    - phone
    - passkey
    - balance
    - public_key(UQ)
    - private_key(UQ)

- Support:
    - id(PK)
    - User_id(FK)
    - ticket_number
    - subject
    - message

- Users_Login:
    - id(PK)
    - Users_id(FK)
    - user_ip
    - location
    - details

- Deposit:
    - id(PK)
    - amount
    - exchange_rate
    - Users_id(FK)
    - charge
    - Transaction_id(FK)

- Transaction:
    - id(PK)
    - public_key(UQ)
    - amount

- Investments:
    - id(PK)
    - amount
    - public_key(UQ)
    - Users_id(FK)
    - Transaction_id(FK)
    - Plans_id(FK)
    - Plans_Compounds_id(FK)

- Plans:
    - id(PK)
    - name
    - minimum
    - maximum
    - Compound_id(FK)

- Compounds:
    - id(PK)
    - name
    - compound

Relationships: Mandatory(M) - Optional(O)

Users -> Users_Login : One(M)-to-Many(M)
Users -> Deposits : One(M)-to-Many(M)
Users -> Support : One(M)-to-Many(O)
Users -> Investments : One(M)-to-Many(M)
Deposits -> Transactions : One(M)-to-One(M)
Transactions -> Investments : One(M)-to-One(M)
Investments -> Plans : Many(M)-to-One(M)
Plans -> Compound : One(M)-to-One(M)