A screenshot of a computer

AI-generated content may be incorrect.

Relations

|  |  |
| --- | --- |
| **User** | UserID (PK), Name, Email, Password (hashed), CreateDate |
| **Portfolio**  **PortfolioHolder** | PortfolioID (PK), UserID (FK), Name, description  PortfolioHoldingId(PK), PortfolioID(FK), SecurityID (FK), Quantity, AveragePurchasePrice, CurrentValue, LastUpdated |
| **Security** | SecurityID (PK), Symbol, Name, Type, Sector, CurrentPrice |
| **Transaction** | TransactionID (PK), PortfolioID (FK), SecurityID (FK), Type (Buy/Sell), Quantity, Price, Date, Fees |
| **WatchlistItem** | WatchlistID (PK), UserID (FK), SecurityID (FK), AlertPrice, DateAdded |
|  |  |

FDS

UserID → Name, Email, Password, CreateDate

PortfolioID → UserID, Name, RiskProfile

Holding\_id → portfolio\_id, security\_id, quantity, average\_purchase\_price, current\_value, last\_updated

SecurityID → Symbol, Name, Type, Sector, CurrentPrice

TransactionID → PortfolioID, SecurityID, Type, Quantity, Price, Date, Fees

WatchlistID → UserID, SecurityID, AlertPrice, DateAdded

Normalize

UserID → Name, Email, Password, CreateDate

BCNF not violated

R1(UserID, Name, Email, Password, CreateDate)

PortfolioID → UserID, Name, RiskProfile

BCNF not violated

R2(PortfolioID, UserID, Name, RiskProfile)

Holding\_id → portfolio\_id, security\_id, quantity, average\_purchase\_price, current\_value, last\_updated

BCNF not violated

R3(Holding\_id, PortfolioID, SecurityID, Quantity, Average\_Purchase\_Price, Current\_Value, Last\_Updated)

SecurityID → Symbol, Name, Type, Sector, CurrentPrice

BCNF not violated

R4(SecurityID, Symbol, Name, Type, Sector, CurrentPrice)

TransactionID → PortfolioID, SecurityID, Type, Quantity, Price, Date, Fees

BCNF not violated

R5(TransactionID PortfolioID, SecurityID, Type, Quantity, Price, Date, Fees)

WatchlistID → UserID, SecurityID, AlertPrice, DateAdded

BCNF not violated

R6(WatchlistID, UserID, SecurityID, AlertPrice, DateAdded)