C R Y P T O X

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Course: CSE311L

Section: 01

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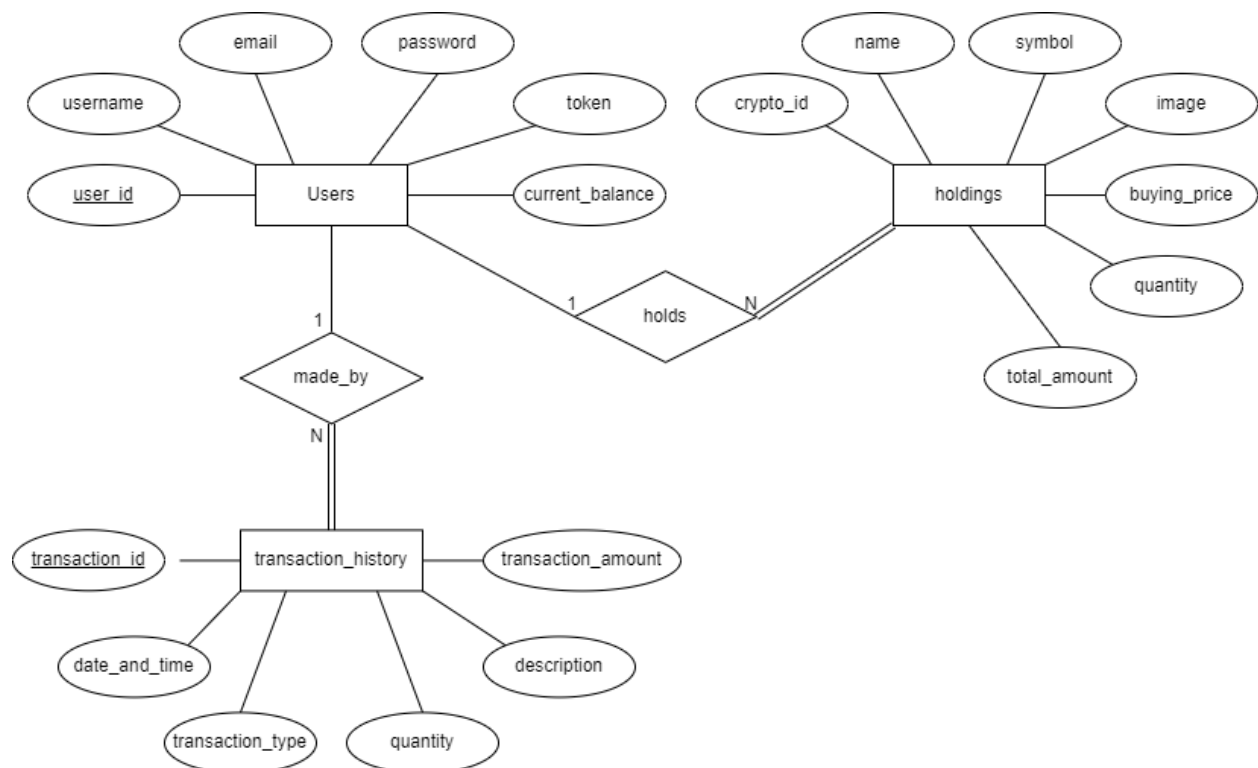
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Project Description

Cryptox is a Digital Wallet to organize cryptocurrency. Users will be able to Add and Withdraw Money; Buy, Sell and Swap cryptocurrencies; see available cryptocurrencies and their rates in the market.

Stack Used:

- **Database** - MySQL
- **Backend** – NodeJS
- **Frontend** – NextJS

Entity Relation Diagram

Query Applied

- **SELECT * FROM users WHERE email=?** – to retrieve information of a specific user.
- **INSERT INTO users (username, email, password) VALUES (?,?,?)** – to insert data of a new user. Here hashed password has been passed.
- **UPDATE users SET token=? WHERE email=?** – to update login token after an user is logged in.
- **SELECT * FROM holdings WHERE user_id=?** – to retrieve all holdings of an user.
- **SELECT * FROM holdings WHERE user_id=? AND symbol=?** – to retrieve a specific holding of an user.
- **INSERT INTO holdings (user_id, crypto_id, name, symbol, image, buying_price, quantity, total_amount) VALUES (?,?,?,?,?,?,?,?)** – to insert into the holdings after an user buys a crypto.
- **UPDATE holdings SET buying_price=?, quantity=quantity+?, total_amount=total_amount+? WHERE user_id=? AND symbol=?** – to update the holdings of an user.
- **DELETE FROM holdings WHERE user_id=? AND symbol=?** – to delete a holding after an user sells or swaps a crypto.
- **SELECT * FROM transaction_history WHERE user_id=? ORDER BY date_and_time DESC** – to retrieve all the transaction made by an user.
- **INSERT INTO transaction_history (transaction_id, user_id, transaction_type, transaction_amount, quantity, description) VALUES (?,?,?,?,?,?)** – to insert data after a trade.
- **UPDATE users SET current_balance=current_balance-? WHERE user_id=?** – to update the current balance of an user. Here we use both + and – to update the balance.