SpeculAPP Arhitecture (B)
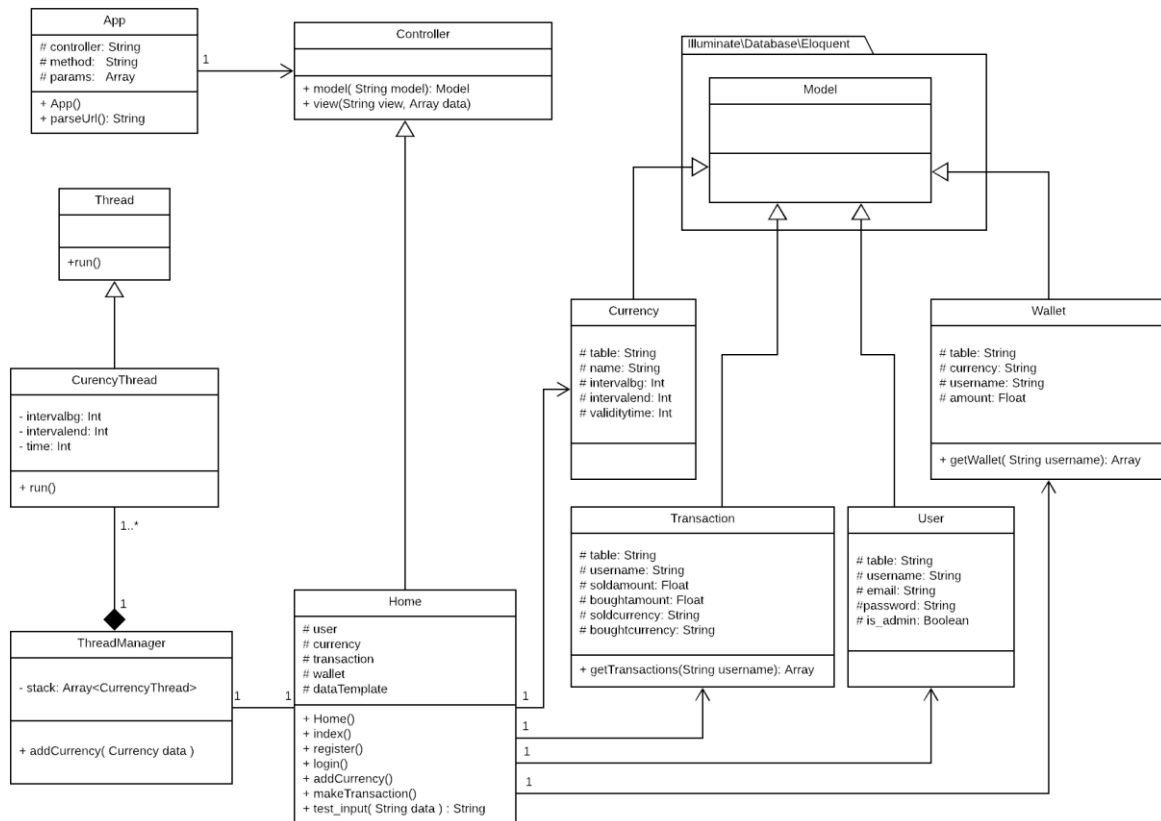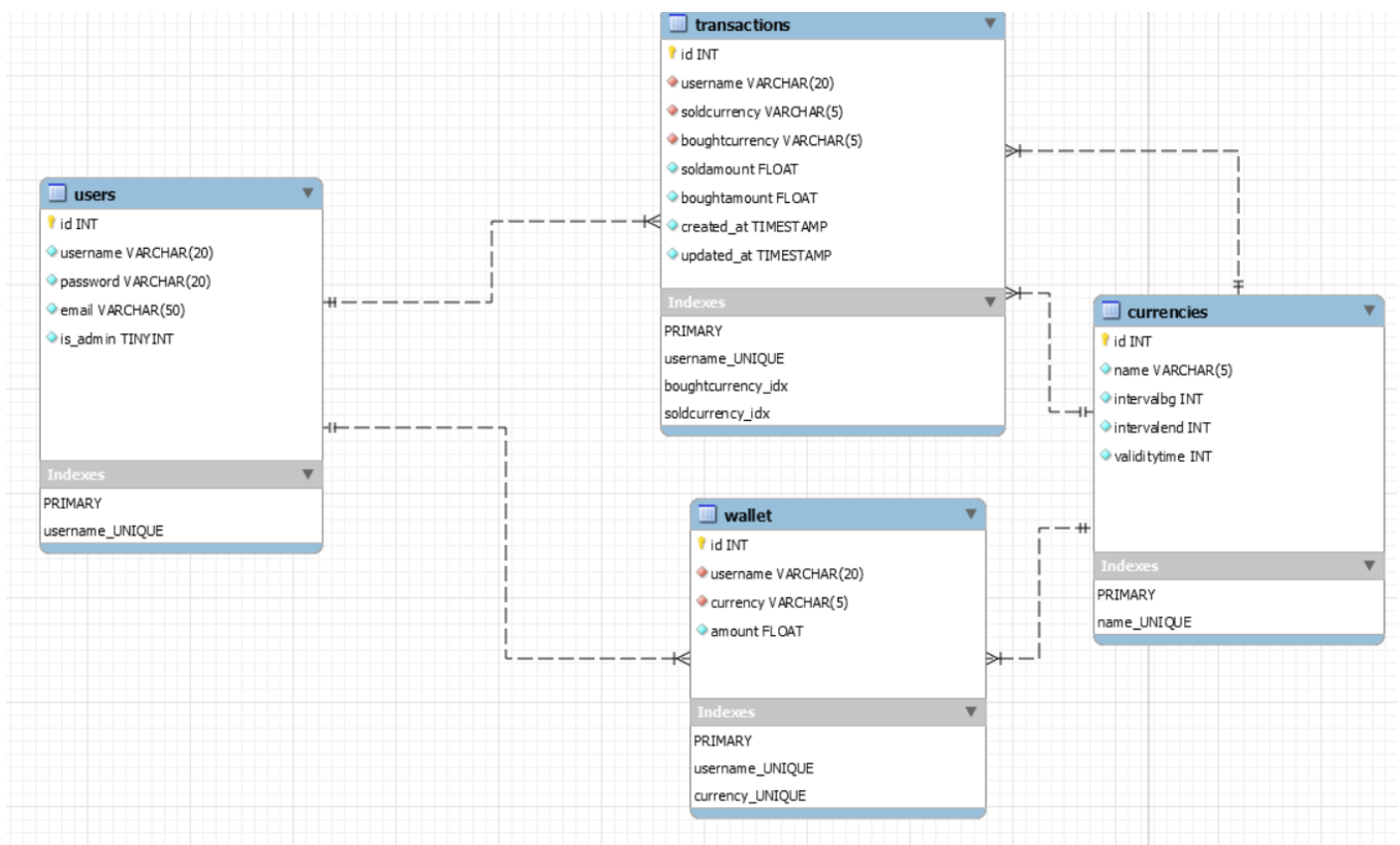
1. Class Diagram

2. Database Schema (SQL)

transactions
- id INT
- username VARCHAR(20)
- soldcurrency VARCHAR(5)
- boughtcurrency VARCHAR(5)
- soldamount FLOAT
- boughtamount FLOAT
- created_at TIMESTAMP
- updated_at TIMESTAMP

Indexes
- PRIMARY
- username_UNIQUE
- boughtcurrency_idx
- soldcurrency_idx

users
- id INT
- username VARCHAR(20)
- password VARCHAR(20)
- email VARCHAR(50)
- is_admin TINYINT

Indexes
- PRIMARY
- username_UNIQUE

currencies
- id INT
- name VARCHAR(5)
- intervalbg INT
- intervalend INT
- validitytime INT

Indexes
- PRIMARY
- name_UNIQUE

wallet
- id INT
- username VARCHAR(20)
- currency VARCHAR(5)
- amount FLOAT

Indexes
- PRIMARY
- username_UNIQUE
- currency_UNIQUE

3. Use Cases

SpeculAPP (User)

- User (1..*)
- visit homepage
- register
  - Add required info «extend»
  - «include» Database
- authentification
  - «include» Database
- exchange page
  - help page
  - «include» virtual wallet
- portofolio page
  - currency page
  - «include» Database
  - «include» virtual wallet

SpeculAPP (Admin)

- Admin (1)
- visit homepage
- authentification
  - «include» Database
- admin panel
  - Add win/lose limits «extend»
    - «include» Database
  - Add currency «extend»
    - «include» Database