FACOIN

CENG431 FINAL PROJECT

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What is FACOIN ?

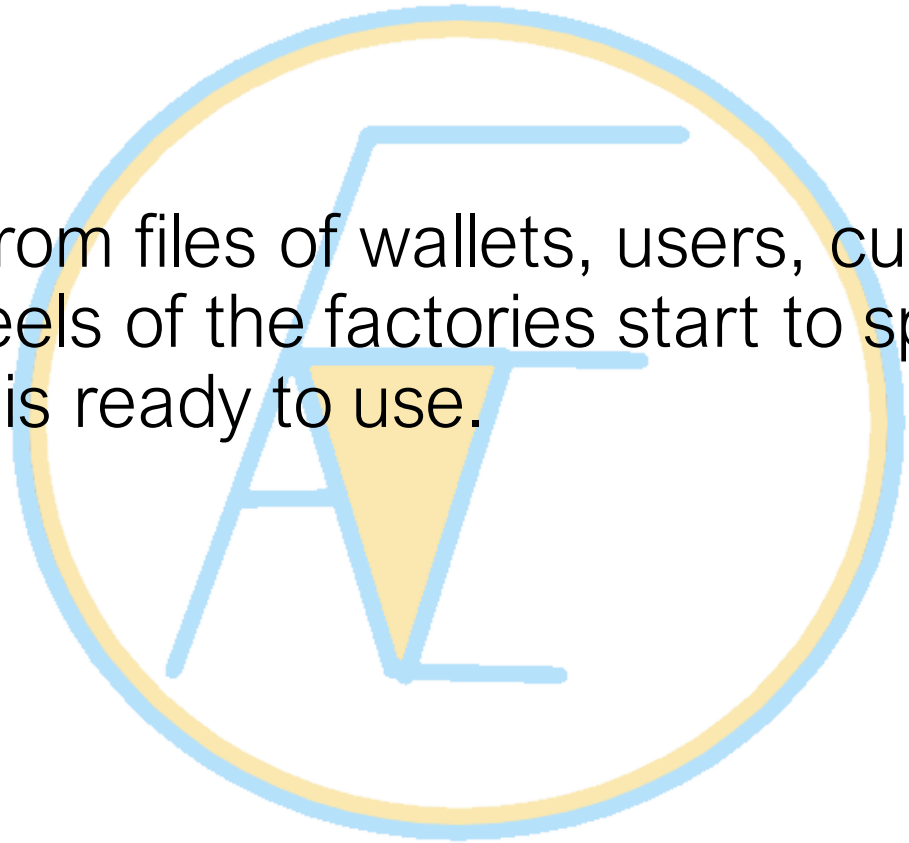
FACOIN is a cryptocurrency exchange platform that provides to trade various cryptocurrencies. You can deposit money, you can create an order to buy and sell the coins with any price you want. To analyze coin you can view day/hour candle chart. **Experience investing with FACOIN in coins, which is a good way to generate income.**

Implementation

In the implementation, there exists 15 main packages, 10 sub packages with 191 classes.

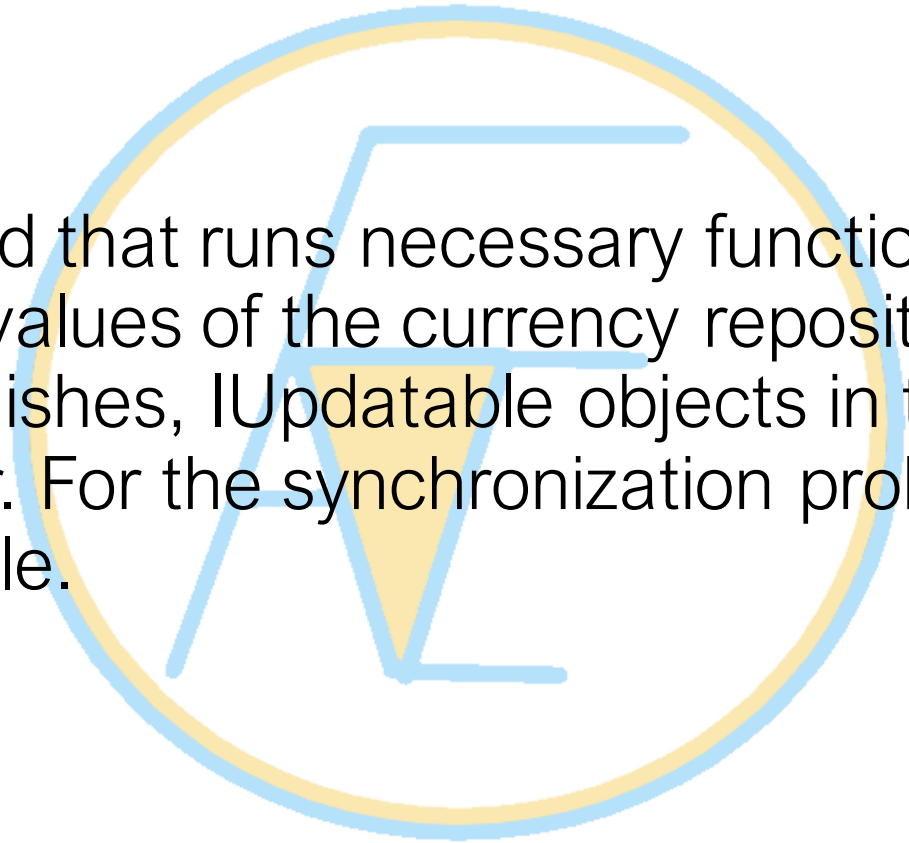
CryptoCompare API is used to get current values and candle information of the coins. Current data received every 10 seconds with the HttpController is sent to the abstract factories after being parsed. Factory returns the necessary objects after validating the data and are kept in our repositories.

Implementation..



With the read data from files of wallets, users, currencies and transaction, the wheels of the factories start to spin. After filling repositories system is ready to use.

How data are updated in every 10 seconds ?

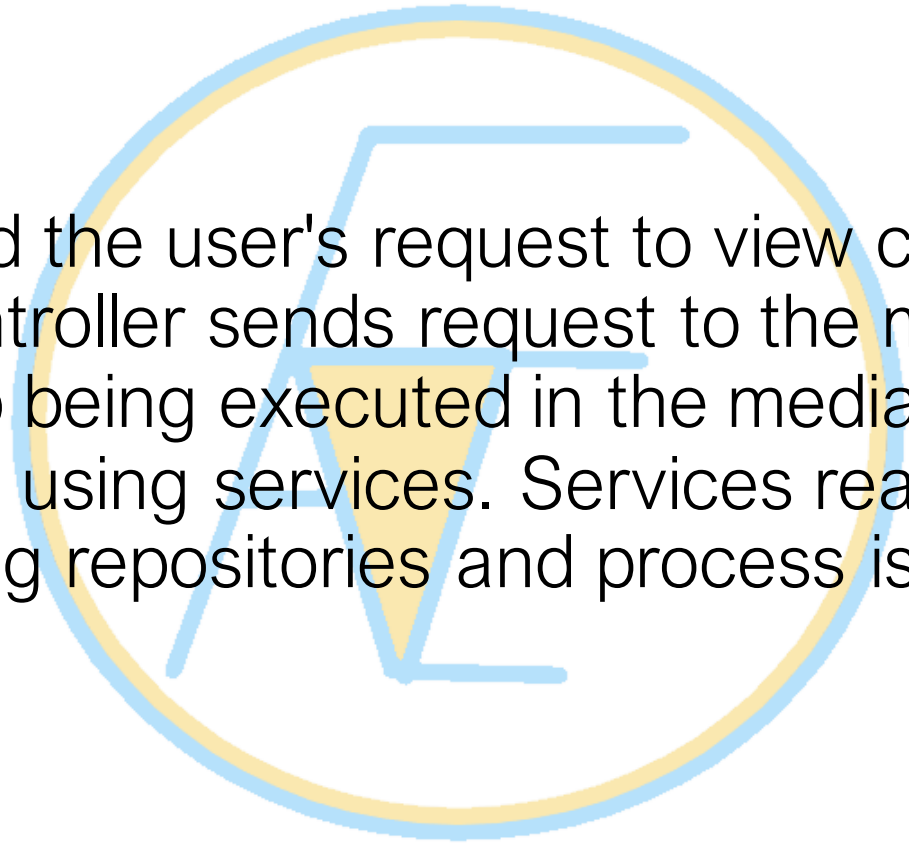


There exists a thread that runs necessary functions in every 10 seconds to update values of the currency repositories. When update operation finishes, IUpdatable objects in the UpdatePool are updated by Updater. For the synchronization problems, we have used MUTEX variable.

How orders of user are executed ?

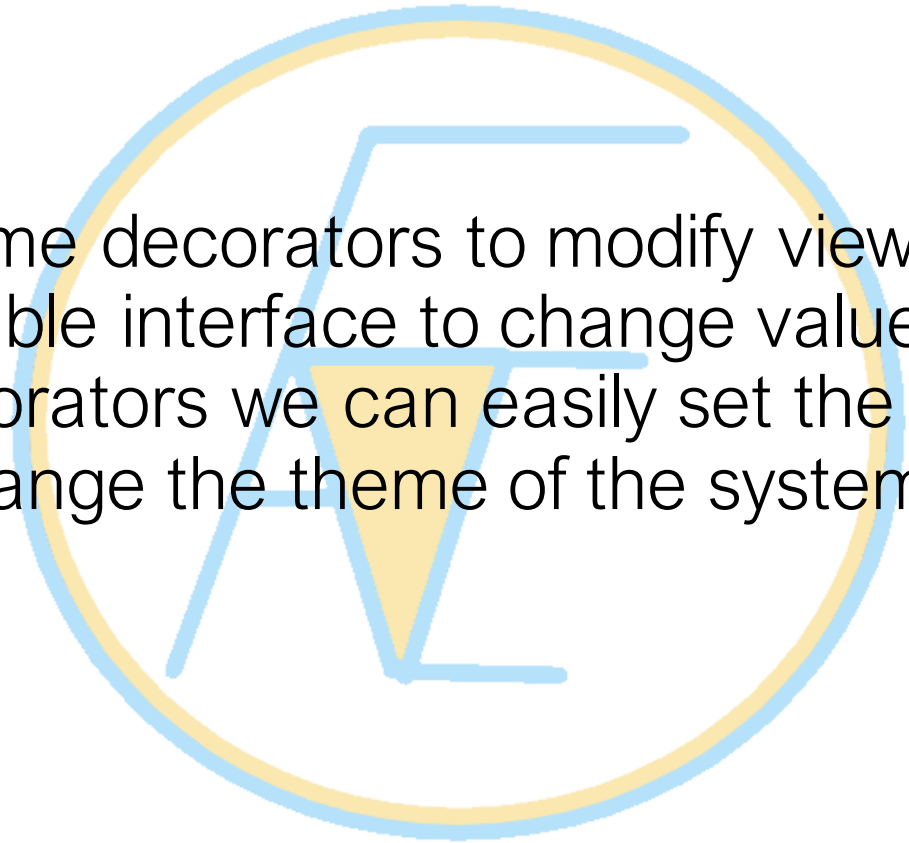
Using current data received every 10 seconds, all transactions of user are looked. For the transaction whose order value is reached, is automatically executed and buy/sell process is approved by states. After that user's bank wallet entities and crypto wallet entities are updated.

The background of the interaction with the user interface



Views' listeners send the user's request to view controllers. After getting request, controller sends request to the mediator and request is started to being executed in the mediator. Mediator does the request process using services. Services reaches the necessary data using repositories and process is executed.

Decorators in the system



System includes some decorators to modify views easily. They implements IUpdatable interface to change values of views. For example, using decorators we can easily set the lists of views, sort the list of a view, change the theme of the system.

THANKS FOR LISTENING