User stories

As a user of trading platform (trader),
I want to place a market order for buying or selling currency pair,
To open position immediately and take part in the moving of market.

As a user of trading platform (trader),
I want to receive confirmation of order execution,
So I know whether order was successfully executed or not and I can make a decision in case of an error.

Requirements for Placing A Market Order

Functional requirements

1. **Parameters.** The system should allow user to configure order parameters:
   - select a currency pair (instrument)
   - select the order direction: buy or sell
   - specify the order amount (number of lots)
2. **Validation.** The system should check:
   - whether the user is logged in and verified. If not, the system should initiate the authorization/verification (KYC) process.
   - the user has sufficient balance to place an order. If not, the system should display an error message.
   - a market and currency pair is open for trading. If not, the system should display an error message.
   - the order amount is within the broker or exchange limits.
3. **Execution.**
   The system must execute the order as quickly as possible at an available market price.
   The system should send to the user confirmation of order execution. In case of an execution error, the system should display an error message with the reason.
4. **Displaying.**
   The system should display the new order in the user's list of open orders and also in the deal history.
5. The order should be updated in real time.

Non-functional requirements

1. **Performance.** The system must process a market order within no more than 2 seconds after user confirmation.
2. **Security.**
   All order placement requests must be transmitted over a secure connection.
3. There must be protection against order resubmission in case of an accidental double-click.
4. **Scalability.**

The system must support at least 10 000 continuously active users without any performance degradation.

The system must be capable of processing at least 1000 orders per second.

Response time must not exceed 2 seconds.

The system must ensure storage of order history and logs for at least 5 years without reducing the data retrieval speed.

5. **Compatibility.** The function should work equally correctly on the web platform and the mobile application.

Preconditions

1. The user has successfully logged in.
2. The user's account has passed all necessary checks (KYC verified).
3. The market and currency pair is open for trading.
4. The user's account is open, active and has sufficient balance.
5. The order amount is within the broker or exchange limits.

Edge cases and error handling

All errors must be logged.

Edge case	Error handling
The user is not logged in	The system initiate authorization process
The user's account has failed KYC verification	Error message displayed. Message contains link to initiate verification
The user's account is not open/active/has not sufficient balance	Error message displayed. Message contains link to open/active account or top up account
The market or currency pair is not ready for trading	Error message displayed.
The order amount exceed the broker or exchange limits	Error message displayed.
Server is not available	The system retries to execute an order one more time. If it has failed an error message displayed.