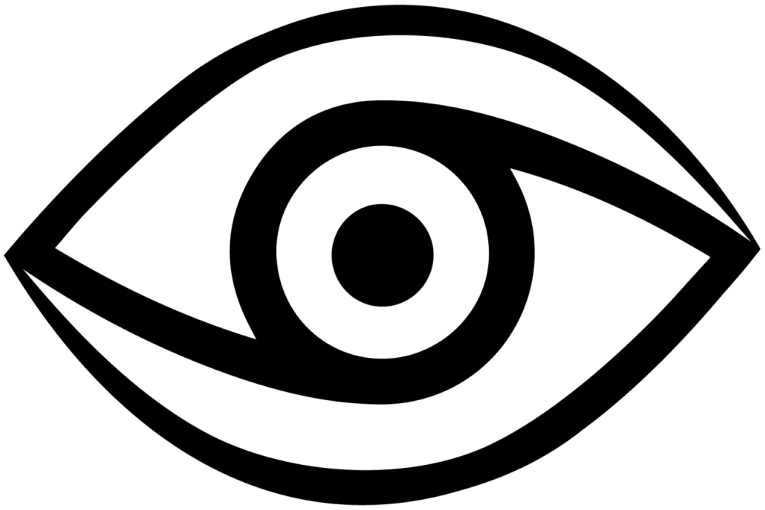
URS

User requirements specification



Date: 28.02.2024
Version: 1.0
Author: Solovenko Danila

Functional requirements

Functional requirements describe the specific features and capabilities of the software.

FR-01: Market Monitoring

- Users must be able to monitor live data of the market.
- Users should be able to see two types of graphs (candles and charts).

FR-02: Strategy Charts

- Users should be able to view different strategy graphs.
- Strategy graphs should show “Buy” and “Sell” points.

FR-03: Profit Calculator

- Application should count possible profit or loss during the given period.

Non-Functional Requirements

Non-functional requirements describe the qualities and constraints of the system.

NFR-01: Performance

- The application should load candle data and display graphs within a reasonable time frame, ensuring a smooth user experience.
- Response times for interacting with different features of the application, such as selecting strategies or customizing graphs, should be minimal.
-

NFR-02: Scalability

- The application should be able to handle a growing number of users and concurrent requests without significant degradation in performance.
- It should be designed to scale horizontally by adding more servers or instances to accommodate increased load.

NFR-03: Security

- User data, including personal information, should be securely stored and encrypted to prevent unauthorized access.
- Access to sensitive features or data should be protected through robust authentication and authorization mechanisms.
- The application should adhere to industry-standard security practices to mitigate risks such as SQL injection, and other vulnerabilities.

NFR-04: Maintainability

- The codebase should be well-organized and documented to facilitate ease of maintenance and future development.
- Changes or updates to the application should be easy to implement without introducing regressions or breaking existing functionality.
- Modular design principles should be followed to promote code reuse and scalability.

NFR-05: Usability

- The user interface should be intuitive and user-friendly, with clear navigation and informative feedback messages.
- Accessibility features should be implemented to ensure that the application is usable by individuals with disabilities.
- User feedback should be solicited and incorporated to improve the overall usability and user experience of the application.

Use Cases

Market Data view

Description: User views historical and latest data.

Main Success Scenario:

1. Actor navigates to the Live Data page.
2. System sends candles for a specific period of time.

Extensions:

1a. Invalid data received from the actor
- System detects data.
- System displays a specific message for invalid fields.

Strategy charts

Description: User chooses and views various strategy charts

Main Success Scenario:

1. Actor selects a specific strategy from the list.
2. System calculators and sends parameters for every candle.
3. Actor views a new chart.

Extensions:

1a. Invalid data received from the actor
- System detects data.
- System displays a specific message for invalid fields.

Profit calculator

Description: user calculates profit for a specific period

Main Success Scenario:

1. Actor enters a sum and period to calculate profit.
2. System calculators profit for the given period with a given sum.
3. Actor receives the calculations and views it.

Extensions:

1a. Invalid data received from the actor
- System detects data.
- System displays a specific message for invalid fields.