

Project milestone 2

Blackbox Tests Preparation

Objective

These tests will verify and its correctness and robustness of the project without understanding its internal working. Also, these black box tests will focuses on the given inputs and expected outputs for each functionality of the system, ensuring all the requirements are met.

Expanded Blackbox Tests

- Define Sector and Stock Tests

Sector Definition: It examines the design strategy of multiple sectors and later ensures they are sufficiently distinguishable among each sector.

Stock Association: The process proves that shares can be put into the right sectors. On the other hand, let's say that trying to associate a share with a non-existing sector is also treated correctly.

- Stock Price Setting Tests

Price Update: It also ensures that the prices of the stock are displayed at that particular time and that such price updates are reflected in the system.

Invalid Price Handling: It examines how the system responds to invalid price inputs being supplied (for instance, something like negative value).

- Investment Profile Creation Tests

Profile Allocation: It confirms the accuracy of the fund allocation in previous profiles and outputs percentages to particular fields, documenting a clear financial scenario.

Invalid Sector Allocation: Try to assigning this system to the sectors that you haven't precisely defined.

- Advisor and Client Management Tests

Advisor Addition: Provide the details that the financial advisors can be added in the system and they should be distinctly identified.

Client Account Creation: Go through the creation model of client accounts with diverse kinds of profiles and division among advisors.

- Transaction Handling Tests

Share Transactions: Give practical scenario where buying and selling shares, including the handling of fractional shares and dividend reinvestment are assumed.

Cash Transactions: Deposits and withdrawals of cash attract attention to the account balance, and the given balances are periodically counted.

- Reporting and Analysis Tests

Account and Advisor Reporting: Look at the correctness of reports determining investor account value, advisor portfolio value, and investor profit.

Divergence and Recommendations: Test the attribution of inconsistent signals and the issuance of share advices.

- Exception and Error Handling Tests

Handling of Nonexistent Entities: Conduct test runs to check how the system reacts when transaction is made with stocks, sectors, advisors, and clients that are nonexistent.

Financial Constraints Handling: See for the transactions that exceed available funds or sell shares that are not held in the portfolio.

Adjusted Development Plan and Timeline

Week 1 (April 6-8):

System Setup, and Basic Functionality is provided.

- Setup project infrastructure.
- The initial stage will involve multiple sectors and individual stocks; the development of the management functionality will follow.

Week 2 (April 9-11): Advanced data and transaction management.

- Include those for investment profiles, advisors, clients, and account management into the app. make them the app's functionality.
- TradeShares is based on the same model, but its implementation and dividend handling should be different.

Week 3 (April 12-14): Attention to the details, Analyzing the details, and Integrating all of these details together in the final report.

- Develop and quality-assurance mechanism for reporting.

- Apply methods of analysis that will cover the weights' effects, the coverage of different sectors, and stock recommendations.
- Merge them all together and run a few tests.

Final Days (April 14-15): Testing and Documentation, and Submission.

- Conduct all blackboxes comprehensively for all functionalities.
- Finish documenting the aforementioned problems and document them accordingly.
- Make sure that you have read the entire project carefully and it does not have any discrepancy among facts once completed.

Conclusion

The provided Blackbox test cases examines system's functionality thoroughly and makes sure all requirements are met. On the other hand, given timelines allocates its time efficiency, ensuring that all the tasks are done in structured manner making hierarchy development of the project. This plan not only ensures the development of the robust system but also provides testing, documentation and refinement before submission.