CHAPTER 6: FUTURE WORK

6.1 Conclusion

This project delivers an end-to-end application for stock trend exploration in a risk-free simulated environment. It successfully integrates Linear Regression-based forecasting [1], [2], [3] with multi-source sentiment analysis and comprehensive portfolio management features. The system demonstrates that linear models can provide effective short-term predictions [4], [5] while maintaining the computational efficiency required for real-time web applications. By combining quantitative forecasting with qualitative sentiment signals, the platform addresses the integration gap identified in current research and provides a practical tool for learning and experimentation in stock market analysis.

6.2 Future Enhancements

1. Notification System
2. Reporting System
3. Logging and Monitoring
4. Testing Implementation
5. Deployment Preparation
6. Final Integration and Testing
7. Documentation and Cleanup
8. Comprehensive Performance Testing
9. Comprehensive Security Testing
10. Usability Testing

11. Compatibility Testing

12. Accessibility Testing

13. Regression Testing Suite

14. Recovery and Resilience Testing

15. Acceptance Testing

16. Test Automation and CI/CD Integration

17. Testing Documentation and Knowledge Transfer

18. Enhanced Invoice Generation System

19. Volume-Based Prediction Modeling per instructions from the jury.

20. Administrative Dataset Management GUI per instructions from the jury.

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