Software Testing of the NextGen Lending System Using Manual and Automated Techniques

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Abstract

The author was involved in the Nextgen Lending project responsible for designing test cases, performing both manual testing and automated testing, and reporting defects to the development team for further system improvement. The system integrates multiple loan products into a single platform, requiring comprehensive testing to ensure accuracy, reliability, and usability.

Various testing approaches and tools were applied to enhance system quality and testing efficiency. Robot framework was utilized to automate repetitive test scenarios, significantly reducing testing time, while manual testing was conducted to verify detailed functionality and validate system requirements. As a result, the testing process became more systematic and effective.

Technology

ZDE ZBO — SCB's in-house tools

Visual Studio Code

Postman

Robot Framework

Introduction

The Nextgen Lending system manages various loan processes and integrates multiple financial products into a unified platform. To ensure reliable operation, systematic testing was performed to validate transaction flows, data accuracy, and overall system behavior.

Through the application of manual and automated testing techniques, the system achieved improved stability and testing efficiency, supporting faster validation cycles and higher software quality. These testing activities contributed to a more complete system that meets organizational requirements and supports future development.

Methodology

The testing process begins with reviewing system requirements to define the testing scope, followed by creating a test plan. Next, test scenarios and test cases are designed based on system workflows and business requirements. Test execution is performed using both manual and automated testing methods. Test results are then recorded. If defects are found, they are reported to the development team and undergo defect triage to assess severity, priority, and root cause. Once the defects are fixed, re-testing is conducted. If all test cases pass successfully, the result is exported as a test report



Conclusion

The testing of the Nextgen Lending system focuses on software testing. Due to the complexity of the system and continuous feature development, manual testing is mainly applied for new workflows. Automated testing is used to support repetitive testing processes, helping reduce testing time. Both testing approaches are applied to detect defects, and ensure that the application meets business requirements

References

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