

Test Automation: Streamlining Testing for a Healthcare Management System

Client

A healthcare provider offering an online platform for patient records and appointment scheduling.

Challenges

- ▶ The system required rigorous validation for compliance with healthcare regulations (HIPAA).
- ▶ Manual testing of APIs for data transfer and authentication was time-consuming and prone to errors.

Solution

- ▶ Developed an API testing suite using **Postman** and **REST Assured** for validating CRUD operations.
- ▶ Automated data-driven test cases to validate multiple scenarios involving patient data and appointments.
- ▶ Performed load testing using **JMeter** to ensure the system could handle concurrent requests from 1,000 users.

Benefits

- ▶ Reduced API testing time by 70%, ensuring faster releases.
- ▶ Identified bottlenecks in database queries, which were optimized for better performance.
- ▶ Improved compliance by automating validation of data encryption and authentication mechanisms.