

Automation Testing & CI/CD Implementation



A leading supply chain solutions to a diverse base of over 29200 active customers such as e-commerce marketplaces, direct-to-consumer e-tailers and enterprises and SMEs across several verticals such as FMCG, consumer durables, consumer electronics, lifestyle, retail, automotive and manufacturing.

They build the operating system for commerce, through a combination of world-class infrastructure, logistics operations of the highest quality and cutting-edge engineering and technology capabilities.

The Challenges

The Client doesn't have proper QA process, and facing several testing challenges that directly impacted the product's delivery and Quality

- Time consuming manual test process
- High Test Cycle Time
- 320 man hours required for regression cycle
- Missing continuous Delivery pipeline
- Loading animations time during a user session

Quarks Solution

Shift-left check the build quality before the developed feature is made available with the existing features

Hybrid Automation Framework

- Hybrid Automation Framework developed using open source tools Selenium, Rest Assure, Appium, TestNg etc
Quarks provided end-to-end automated testing in an Agile environment, utilizing only open source tools for automation:

Hybrid Test Automation and implemented the continuous delivery using Selenium, Rest Assure, Appium, TestNG, GitHub Actions etc

Implemented Common client which will be used for Web, Mobile, API automation

Implemented best QA practices and organised tests in Azure Test Management tool

Implemented CI pipeline using GitHub Actions

The Benefits

Quarks innovative solutions helped:

- Achieving 99% test coverage
- Early detection of defects by ~75% by Shift-left automation
- 6x faster test runs, 10 minutes feedback loop
- Reduced regression time to 5 machine hours
- 40% saving in testing resources