Large Scale Test Automation using Selenium for Higher Education Provider

**BUSINESS REQUIREMENTS**
- Create a comprehensive, maintainable, enterprise level Automation Suite for web based Learning Management System
- Improve product quality by automating all backlog/ regression test cases. Integrate with Jenkins for supporting CI
- Script Execution Support for IE, Firefox, Chrome & Independent data cleanup

**OUR SOLUTIONS**
- Use of Open Source Tool- Selenium
- Agile methodology with 4 weeks sprint
- SONAR implemented for code violations, adherence to standards

**TOOLS/ TECHNOLOGIES**
- Test link for test management, Selenium for UI test automation
- Jenkins for CI, Git/ Stash for code management
- SONAR for Code violations, Redmine for Task tracking

**BUSINESS IMPACT**
- 5000 test cases were validated and updated as per the recent version of the product
- Automation accelerated the time to market and caught bugs at a very early stage
- Test suite covering all regression scenarios. Additional cases can be easily added to the suite

**ARCHITECTURE/ INTERFACE DIAGRAM**

**Integration Layer**
- Jenkins
- Email, Scheduler
- TestLink
- Test management
- Test reports
- Test statistics
- Framework

**Framework Layer**
- Utility Handlers
- i/o handlers
- Custom handlers
- Configuration handlers
- Core POM
- Reporting Module/ Framework
- JUnit
- TestNG-XSLT

**Execution**
- Application Under Test
- Local execution

**Page Object Layer**
- Page Objects
- Page Factory
- Error handling/ Recovery
- Object Repository
- Locator
- Configuration

**Test Script Layer**
- Test Data
- Test Suite
- Execution Configuration
- Test NG
- Local execution

**Parent POM**

**About Us**
Happiest Minds, the Mindful IT Company, applies agile methodologies to enable digital transformation for enterprises and technology providers by delivering seamless customer experience, business efficiency and actionable insights. We leverage a spectrum of disruptive technologies such as Big Data Analytics, AI & Cognitive Computing, Internet of Things, Cloud, Security, SDN-NFV, RPA, Blockchain, etc. Positioned as “Born Digital . Born Agile”, our capabilities spans across product engineering, digital business solutions, infrastructure management and security services. We deliver these services across industry sectors such as retail, consumer packaged goods, e-commerce, automotive and travel/transportation/hospitality.

Headquartered in Bangalore, India; Happiest Minds has operations in USA, UK, The Netherlands, Australia and Middle East.

business@happiestminds.com