

CLEAR COMMUNICATION, EVERY TIME!



The MTN Group Limited is a leading provider of communication services, offering cellular network access and business solutions, Launched in 1994. The MTN Group is a multinational telecommunication group, operating in 23 countries in Africa, Middle East and Europe. As of September 2015, MTN recorded more than 230 million subscribers across its operators.

The KiwiQA approach

With the current scope, we will achieve better regression coverage that will also accompany more exploratory flavour by reducing manual execution and increase the confidence which is critical to business processes.

Project Summary

Project Name: **MTN | STL Automation**

Project domain: **Telecom management**

Users: **Telecom Operators and Subscribers**

Project Duration: **13 months**

Project type: **Automation**

Bug tracking tool: **JIRA**

Services Offered by KiwiQA: **Automation testing along with Mobile View**

Innovative communication solutions for the modern world

MTN has grown from a well-known brand through its chain of international experience during the past years in telecommunication becoming the first African telecom company ranked no 79 among the top 100 global brands according to Millward-Brown Brandz for the year 2013, it crossed 230 million subscribers among its operating companies around the world and the one and only African company sponsoring the FIFA World Cup – South Africa in 2010.

TAKING A STEP-BY-STEP APPROACH TO ADDRESSING ISSUES

Problem brief to be resolved

The following issues were sought after by the client to be solved:

- Test newly developing Digital Engagement Portal (dEP) and identifying deficiencies, bugs
- Investigate product quality in order to make improvements to achieve better customer satisfaction
- Plan, create and manage the overall 'Automation Test Planning' strategy.



- Collaborate with the Product Development team to ensure consistent project execution
- Present test result and test reports to Senior Management
- The website needed to offer seamless services in Arabic
- There was a need for constant monitoring to ensure that the systems were functioning smoothly.

ACCOMPLISHING THE INTENDED RESULTS



Framework Approach:

- Selection of proper Hybrid framework for UI automation.
- Demoed PoC to customers using our home-grown framework **K-FAST**.
- Developed script according to the client's requirement using *Selenium & Java*.
- Used dynamic XPath or class names to make automation scripts more stable.
- For Arabic language verification, a properties file was created containing key (English literal) and value (respective Arabic literal) pairs.
- Created excel file test data, separated as per Modules for which it'd be used.
- Automation scripts were to run through batch files without IDE, so the manual team could execute the script by double-clicking batch files for each Sprint.
- ExtentReports was specifically customized as per STL team's requirement for displaying test execution reports.



Tools/technology

To We have used Selenium with Java for scripting, Maven for Project Management, TestNG for Test Management, ExtentReports for reporting Test Execution Results and Apache POI libraries for various data operations.



Script Review and Submission:

The developed script was reviewed by the STL QA Team before closing the sprint. Once reviewed, we uploaded the code in the STL's shared GitLab repository in the respective branch. (Sprint wise branch was created on the GitLab repository.)

WHAT WE ACHIEVED

We achieved better regression coverage that will also accompany more exploratory flavour by reducing manual execution and increase the confidence which is critical to business processes.

We have also managed requirements changes after completing the whole QA process, so to be on track for other pipelined tasks we had put extra effort by stretching the shifts. We were able to deliver the error free launches of new features effectively to the client just because of our dedication and effective time management. Before the end date we had delivered all the assigned tasks successfully and also conducted the knowledge transfer processes to their internal QA team and ensured the hassle-free journey towards the success of our client.

Hence, we were able to deliver below features to client without any miss and within given time:



Total User Stories covered in ETE test scripts: **76**



Total ETE test scripts written till now: **21**