Summer 7-1-2020

# RPA Bot Reliability Platform

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## ABSTRACT

Robotic Process Automation is the technology that allows anyone today to configure computer software, or a "robot" to perform the task done by human beings manually to be performed by the Bots automatically. They trigger objects, interpret received responses and communicate with other applications in order to perform a huge variety of repetitive and tedious tasks. Since RPA Bots are computer software's, it never sleeps and makes zero mistakes. In this project our main aim is to create a testing framework that can test all the existing Bots automatically and generates a report that tells about the Bot's execution behaviour across each test case.

In order to accomplish this objective, we divided the testing framework into three parts – test data creation, test suite and test validation. First the testing framework will generate the test data which will be utilized by the Bot for its execution, then test suite will perform all the actions required to test the Bot and finally in the test validation, it will compare the text message present in the test script to the message present in the Bot logs for corresponding test case. If the message present in the test script is similar to the message present in cloud factory, then testing framework will pass the test case indicating that Bot is executing as expected whereas if message present in the cloud factory doesn't match with the test message present in the test script, testing framework will fail the test case indicating there is a problem in Bot's execution.

Automating testing of Bots is beneficial for humans and has shown significant improvement in task performance. A simple testing of Bot which requires almost an hour for humans to test it, requires only 5 – 10 mins for testing framework to test it automatically, thus increasing the overall productivity of the team towards more important tasks.