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**Single Repository Test Automation Framework for UI, API and
Mobile Test Automation**

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ABSTRACT

The software industry has come a long way since its great breakthrough in the early 90s. The industry has advanced in a gradual but steady manner so that the software that is being developed is tested in every aspect and each and every feature is descriptively tested against the expected functionalities. Nowadays modern software and its development methodologies have added an extra quality of being time-efficient to the Quality Engineering process. With this, test automation techniques were introduced to the software testing world. But with the advancement of automation techniques and their usage of it in testing vast enterprise-level applications an overhead in maintaining these automation test codebases has become an issue.

To overcome this overhead situation the author has suggested the employment of a framework which can have the codebases for UI, API and Mobile aspects which will reside inside a single repository, which gives the capability in maintaining the test suite in an efficient and resourceful manner.

The initial results and results from the evaluations show that the development of the framework was successful. The future work for this particular project will include transferring the technology stack to support JavaScript and optimizing the current codebase to run the framework with minimal requirements.

Keywords: *Test Automation, Hybrid Test Framework, UI Automation, API Automation, Mobile Automation, Single Repository*