Adapting XML Instance Generators for Web Service Testing

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Oral Presentation Abstract:

An automated testing framework for web services using generated XML instances is presented. Three existing XML instance generators are TAXI [1], ToXgene [2], and Agoxi [3]. Through the creation of a standardized evaluation framework, the three XML instance generators can be compared. The proposed evaluation framework uses mutation analysis to accurately simulate real world programming faults in order to measure the failure detecting ability of XML instance generators [4]. The development of a module responsible for adapting each of the XML instance generators for use in the evaluation framework is presented. Given a WSDL and a test generator, the module executes the selected generator and collects the output into a standardized file for use in the evaluation framework. The results can then be passed on to the framework's test execution module which stores the outcome of the analysis in a database. Evaluating the XML instance generators with this framework will assist in choosing the most robust choice for web service testing.

References

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