

Bachelor Thesis

iOS-Extension to the Higgs Framework

Student Worker

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Topic

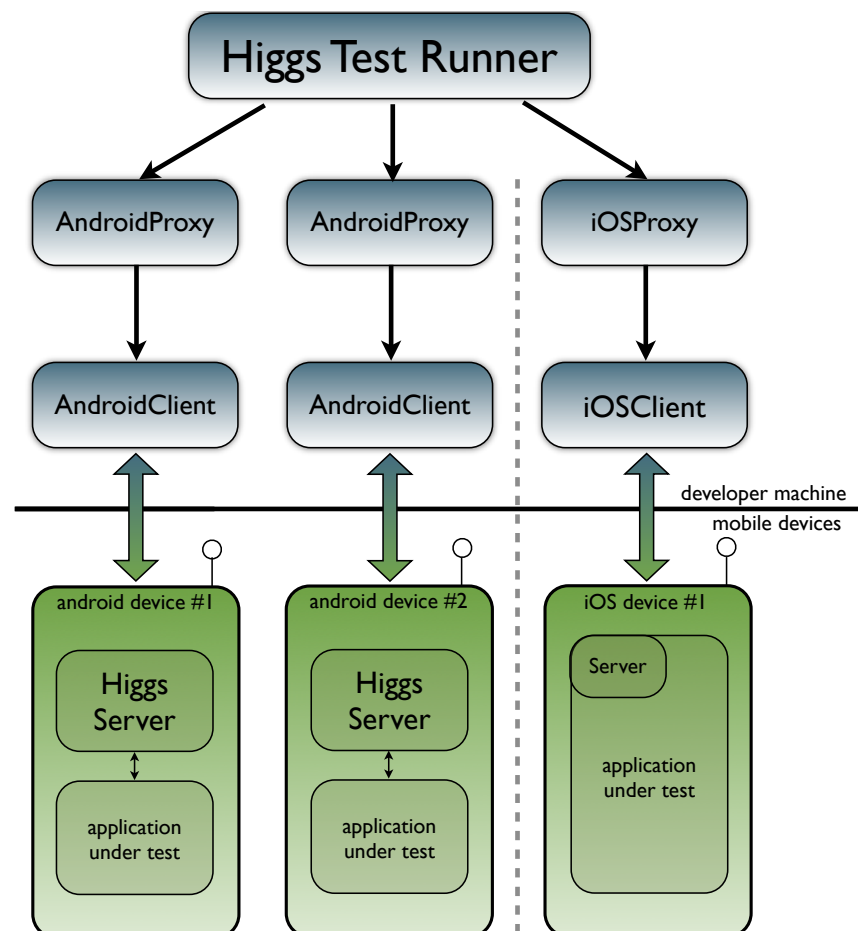
Robert Mathes developed in his diploma thesis at the Embedded Software Laboratory a cross-device testing framework, called Higgs. Higgs is capable of executing test cases, which span over more than one mobile device. Until now, Higgs only works with Android devices. This work shall extend Higgs to work with Android as well as iOS devices. Such an extension allows to execute test cases, which span over more than one platform.

Goal

The objective of this thesis is to extend Higgs, which currently works only with Android devices, to manage iOS devices as well. The functionality of Higgs in the area of Android (checking GUI elements, making phone calls, ...) shall be available on iOS devices, too (if possible).

Approach

The previous version of Higgs implements a device proxy to handle the communication that the developer machine initiates with the mobile device. In a first step, this structure will be extended to handle Android and iOS proxies with corresponding clients. During test execution on the smartphone side, a Higgs server is running and interacts with the application under test. Since iOS sandboxing restricts this kind of interaction, the server has to be embedded in the application under test. Therefore we chose the open-source iOS testing server *Frank* as a basis. Finally, a Frank driver for Higgs shall be implemented.



Supervisor

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