Introduction
This thesis was commissioned by Verifyter AB, a software startup company which has developed a verification tool called PinDown that automatically debugs test failures. The goal of this thesis was to design a dashboard for one of the features of the graphical user interface. Based on a set of criteria we looked into which frameworks would be good options for implementing the design and for future development of the web application. With a new GUI Verifyter is looking to address some issues as well as to update the overall look and feel.

Approach
For question 1 and question 2 we made analysis based on different sets of criteria. For question 1 we used Lauesen’s (2002) definition of usability as our criteria. Lauesen’s definition is made of five factors; ease of learning, task efficiency, ease of remembering, subjective satisfaction, understandability. For question 2 we had two sets of criteria, one for front end libraries and the other for back end frameworks. These criteria were formed after discussion with Verifyter. The front end criteria were: backward compatibility, responsiveness, offline JavaScript libraries (hosted locally). And the back end criteria were: backward compatible with JVM, compile to WAR, able to obfuscate, server-side thread-safe.

For question 3 and question 4 we followed a process of based on Lauesen’s (2002) definition of usability as our criteria. Lauesen’s definition is made of five factors; ease of learning, task efficiency, ease of remembering, subjective satisfaction, understandability. For question 2 we had two sets of criteria, one set for front end libraries and the other for back end frameworks. These criteria were formed after discussion with Verifyter. The front end criteria were: backward compatibility, responsiveness, offline JavaScript libraries (hosted locally). And the back end criteria were: backward compatible with JVM, compile to WAR, able to obfuscate, server-side thread-safe.

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References