1. SimiDroid: identifying and explaining similarities in Android apps

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Abstract: App updates and repackaging are recurrent in the Android ecosystem, filling markets with similar apps that must be identified and analysed to accelerate user adoption, improve development efforts, and prevent malware spreading. Despite the existence of several approaches to improve the scalability of detecting repackaged/cloned apps, researchers and practitioners are eventually faced with the need for a comprehensive pairwise comparison to understand and validate the similarities among apps. This paper describes the design of SimiDroid, a framework for multi-level comparison of Android apps. SimiDroid is built with the aim to support the understanding of similarities/changes among app versions and among repackaged apps. In particular, we demonstrate the need and usefulness of such a framework based on different case studies implementing different analysing scenarios for revealing various insights on how repackaged apps are built. We further show that the similarity comparison plugins implemented in SimiDroid yield more accurate results than the state-of-the-art. (0 refs)
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Data Provider: Engineering Village