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Automatic generation of android SQLite database components

(Conference Paper)

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Abstract

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Mobile applications (apps) are becoming ubiquitous and at the same time getting more complex to develop. Specific development tools and techniques are always essential to facilitate the development of reliable and cost effective mobile apps. However, a large fraction of Android app developers are known to be novice and come from non-computing background. To assist developers, this paper addresses the problem of automatic generation of Android database components , and presents a technique for creating SQLite database and APIs. The technique is based on a tool named Android SQLite Creator (ASQLC) that can automatically generate Android SQLite database as well as the API classes that perform read/write operation on that database . To evaluate the tool, a preliminary experiment was conducted by junior computer science students in building a small size Android database . This preliminary evaluation shows that our tool can be usable and promising particularly for novice developers. © 2018 The authors and IOS Press. All rights reserved.

SciVal Topic Prominence

Topic: Testing | Graphical user interfaces | automated testing

Prominence percentile: 95.031



Author keywords

[Android](#) [Automatic generation](#) [Model-driven](#) [SQLite](#)

Indexed keywords

Engineering controlled terms:

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- 1 Amalfitano, D., Fasolino, A.R., Tramontana, P., Ta, B.D., Memon, A.M.
MobiGUITAR: Automated Model-Based Testing of Mobile Apps

(2015) *IEEE Software*, 32 (5), art. no. 6786194, pp. 53-59. Cited 120 times.
<http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=52>
doi: 10.1109/MS.2014.55

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- 2 *How to Use SQLite to Store Data for Your Android App*
<https://www.androidauthority.com/use-sqlite-store-data-app-599743/>

- 3 Zein, S., Salleh, N., Grundy, J.
A systematic mapping study of mobile application testing techniques

(2016) *Journal of Systems and Software*, 117, pp. 334-356. Cited 47 times.
doi: 10.1016/j.jss.2016.03.065

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- 4 Zein, S., Salleh, N., Grundy, J.
Mobile application testing in industrial contexts: An exploratory multiple case-study

(2015) *Communications in Computer and Information Science*, 532, pp. 30-41. Cited 5 times.
<http://www.springer.com/series/7899>
ISBN: 978-331922688-0
doi: 10.1007/978-3-319-22689-7_3

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- 5 Zein, S., Salleh, N., Grundy, J.
Static analysis of android apps for lifecycle conformance

(2017) *ICIT 2017 - 8th International Conference on Information Technology, Proceedings*, art. no. 8079982, pp. 102-109. Cited 2 times.
ISBN: 978-150906332-1
doi: 10.1109/ICITECH.2017.8079982

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- 6 Dar, S.A., Iqra, J.
Synchronization of data between SQLite (local database) and SQL server (remote database)
(2016) *IUP Journal of Computer Sciences*, 10 (4), p. 7.