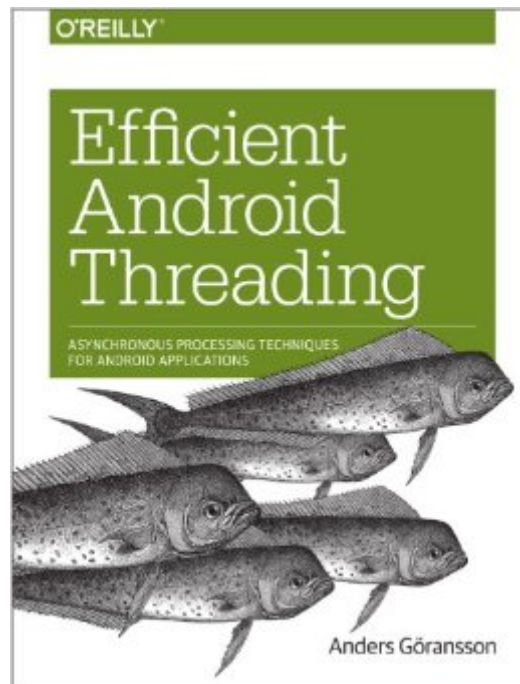# Efficient Android Threading: Asynchronous Processing Techniques For Android Applications

Synopsis

Multithreading is essential if you want to create an Android app with a great user experience, but how do you know which techniques can help solve your problem? This practical book describes many asynchronous mechanisms available in the Android Sdk, and provides guidelines for selecting the ones most appropriate for the app you&#8217;re building. Author Anders Goransson demonstrates the advantages and disadvantages of each technique, with sample code and detailed explanations for using it efficiently. The first part of the book describes the building blocks of asynchronous processing, and the second part covers Android libraries and constructs for developing fast, responsive, and well-structured apps.Understand multithreading basics in Java and on the Android platformLearn how threads communicate within and between processesUse strategies to reduce the risk of memory leaksManage the lifecycle of a basic threadRun tasks sequentially in the background with HandlerThreadUse Java&#8217;s Executor Framework to control or cancel threadsHandle background task execution with AsyncTask and IntentServiceAccess content providers with AsyncQueryHandlerUse loaders to update the Ui with new data

Book Information

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Customer Reviews

4.5 to be more exact. Gets straight to the point. Actually, I found the topics quite complex than I originally thought. It took me almost a month to finish the book(part time study and few days off) as opposed to 3 days as someone has mentioned earlier. I made a separate note book because the

topics were still complex for a beginner like me with little Java and Android experience. Once, I started making notes, the structure and the content of the book started to make sense to me. After Big Nerd Ranch Guide on Android, I'm glad that I chose this book.This book gives to reader what it promises - Efficient Android Threading and the description says it all. Plus, it is also covers Java's own core libraries on threading. Now, I just can't see how I can claim myself to be a student of Android Programming, if I had ignored the importance of Threading in app development. Especially for android developers, where the platform is normally run on small hand held devices, the issue of memory leak and the effective use of processing time is all too frequent. Better learn to deal with it earlier in the game :). Also, the diagrams in the book were very informative.I purchased the kindle edition. Perhaps, the content could have been more clearer by numbering the headers(1, 1.1 , 1.1.1 and so on). Sometimes, it got little confusing for me to get into my brains while trying to see the whole picture.The topics were sequential though and on the right order. I found couple of instances of repetition of concepts which had just been explained in previous page or recent past. Personally, I would have preferred if some of the complex concepts were explained in a story telling manner. Nevertheless, a great book by the author and recommend it for serious android developers who know basic android platform and want to dive in deep. Furthermore, this book is guaranteed to be there as a reference guide while deciding on different threading techniques to choose from.

Great book. Way less typos then you would typically find in an android book, and covers an academic topic in a pragmatic way.I think the title is holding it back, by only describing one aspect of android. The book itself goes over ContentProviders, Services, lifecycle issues, the underlying Linux process model, and, yes, efficient android threading.I'd call it "Android, The Invisible Parts" or something like that. A tremendous 2nd book on android and fills a huge gap in the field.

Finished this book in 3 days and now I'm much better off writing high efficiency android applications. Thanks Anders.This book walk you through all corners of android multiple threading. A lot of code snippets are provided to help you understand each technology in a real use case.Also if you don't have time for whole book, you can check out the author's talk at droidcon 2013. It's only 30 minutes and summarize the async technology you should use very well. Here is the link:[...]

A true "must read" for any android developer! The overview of the different threading option, and the pros and cons of them, is something that I will come back to in all my future application development. The well written code examples adds even more value to this fantastic book!

Highly recommended for any android dev who wants a better understanding of the full android stack.

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