Android Memory Optimization

International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 182
Number 41
Year of Publication: 2019
Authors:
Kashif Tasneem, Ayesha Siddiqui, Anum Liaquat

10.5120/ijca2019918504

Abstract

Android is the most widely used smartphone OS, but it has always lacked behind iOS due to poor memory management. Many memory management techniques have been proposed until now such as Managing GPU Buffers, Detecting and Fixing Memory Duplications, Dynamic Caching etc. All of these techniques revolve around Android's current memory structure which is Garbage Collector. In this paper, instead of improving the current structure, a different structure for memory management which is used in iOS known as Automatic Reference Counting (ARC) is proposed.

References


**Index Terms**

Computer Science  
Software Engineering

**Keywords**

Main Memory, Operating System, OS, Android, iOS, Memory, Optimization, Cache, Pages, Paging, Garbage Collector, GC, ARC, Automatic Reference Counting