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