ABSTRACT

Cache is a temporary storage data that are frequently accessed. With *cache* future request can be served faster, but, a larger size of *cache* is considered non efficient. It has been the case in the mobile devices that of limited memory. *Cache* have limited size data. When the *cache* is full, it must choose objects data will be replaced with a new one which is called *cache replacement*. DEWMA (Dynamic Exponentially Weighted Moving Average of Durations (DEWMA) has been considered as an efficient *cache* replacement method that choose wich object must be replaced. DEWMA scheme can calculate the duration of an object that is being stored in *cache*. In the calculation of the duration, there are weights attributes(δ) which determines the priority of an object at the scheme, whether to prioritize newly accessed objects or long-standing object in the *cache*. According DEWMA scheme enables proritization newly accessed storage by users. Hence the decrease in the response time and the increase in the *cache* hit ratio score.

Keywords:*mobile database, cache replacement, DEWMA, weights attributes(δ)*