Gebze Technical University

Department of Computer Engineering

CSE 312 /CSE 504

Operating Systems Spring 2021

Homework # 3

171044065

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|Address|Reference Bit|Second Chance Bit|Age|Present Bit

A page table design like above will be enough for implementing Second-Chance, LRU and WSClock algorithms.

Address field: It is the mandatory field for page table to complete its task since its prior task is map virtual page tables and physical ones.

Reference bit: It is used since WSClock algorithm uses Reference bit to decide if it will look for the next page entry or select that page.

Second Chance Bit: It is another binary value indicating it is referenced only in previous operation. This bit will be set to 0 while traversing the table in next table look up.

Age field: Age field is used in both WSClock implementation and can be used to implement least recently used algorithm by holding the age when that bit last referenced by using computer time or a counter inside the program.

Present Bit: If the page is stored in memory or disk.