Faculty of Engineering
Computer and Systems Engineering

CSE 322: Operating Systems

Report

Memory Assignment

Submitted by

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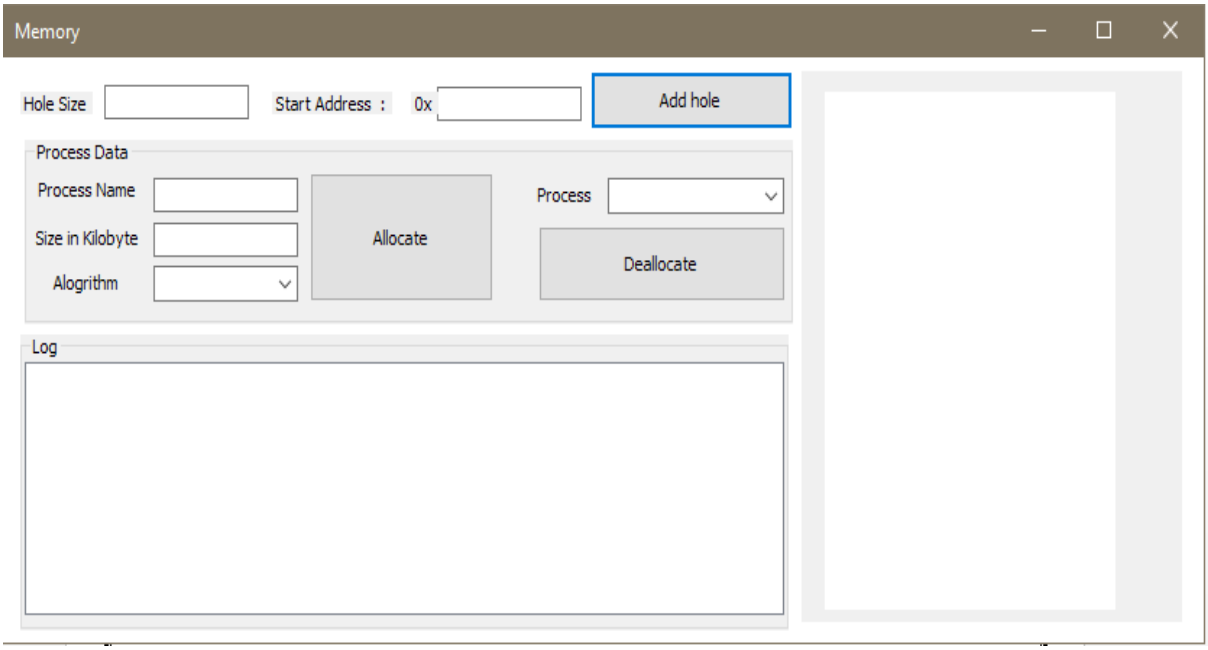
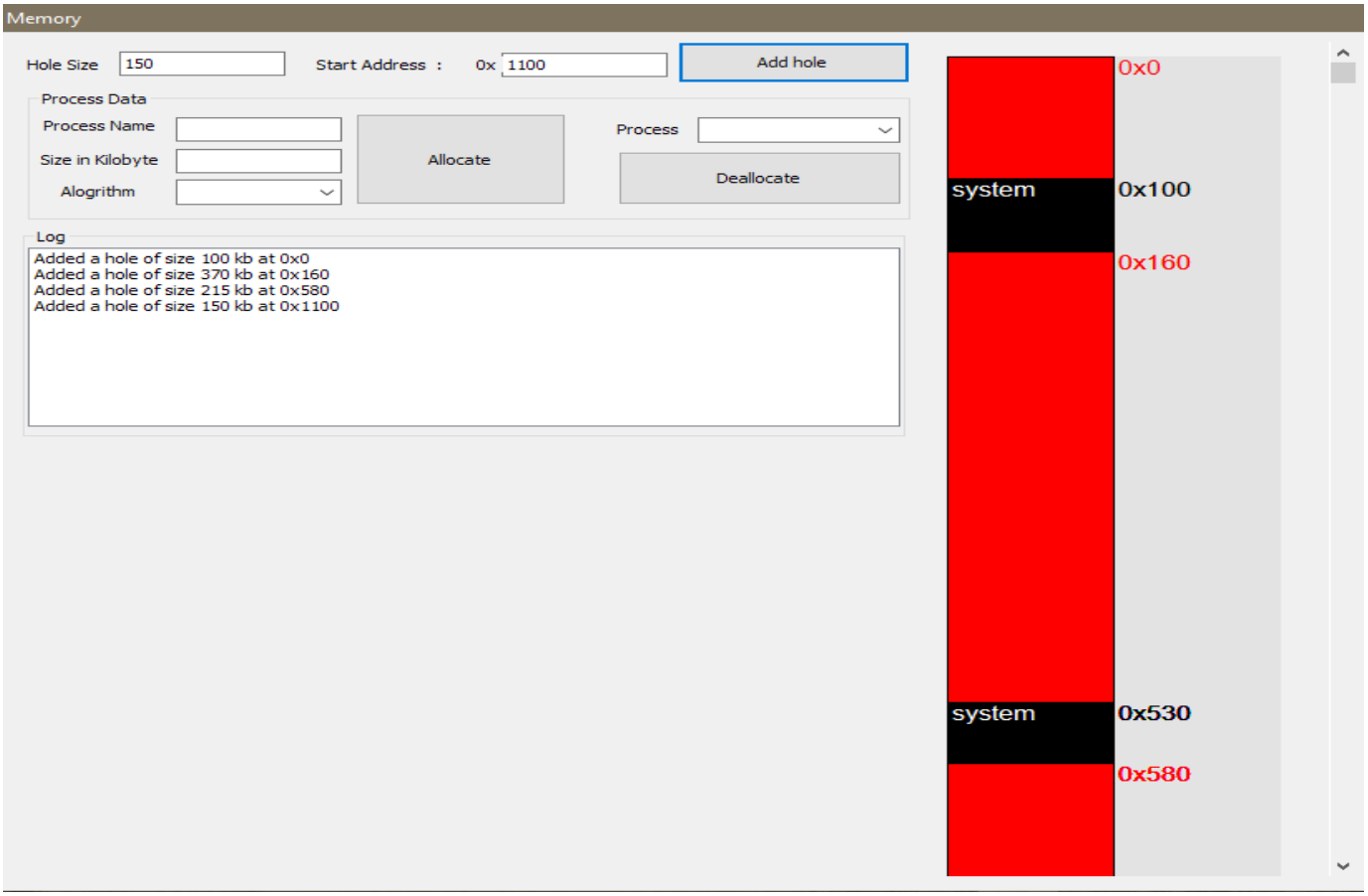
- Our program supports all contiguous allocation algorithms :
    1. First Fit.
    2. Best Fit.
    3. Worst Fit.
- Also you can allocate any process with any one of the previous algorithms, you don't have to choose one algorithm for all the processes allocating.

- **Program Guidelines:**

    1. Open Memory.exe a form like the one below will appear



    2. Adding a hole is done by specifying a hole size in the size field and its starting address at the address filed then press Add hole button. The hole will be presented in red.
       P.S. the gaps between the holes you have added will be presented in **black** as a black box in memory.
       There is a slider bar at the right of the form, while adding the holes you can see what you have added by scrolling down.
       In the log you can see the history of what you have done.



3. Similarly you can allocate a process: pick a name for you process in case you forget a name "process #n" will be its name where n is the number of the process you allocated in order. The process will be presented in green.
4. Any time you want to add a hole or allocate a process or de-allocate a process allocated previously you can do it easily.

Extra Features:

- We support worst fit algorithm.
- We handle all cases of concatenation
    - **Adding two holes sequentially (no separation between them)**
    - **After deallocation of any process a concatenation of the holes occurs**
- Unused memory between holes are considered as pre-reserved for the system and can't be used for process allocation. However, if the user decided to use this space later he can simply add hole in it.