CSC369 Week 5 Notes

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1 Memory Management

- Physical Memory vs Virtual Memory [1]

    - Physical Memory

        * Is RAM :)!!
        * Is the first memory used when computer requires memory such as loading application or OS

    - Virtual Memory

        * Is stored on hard drive
        * Is used when RAM is filled
        * Is slower than RAM

    Refernces:

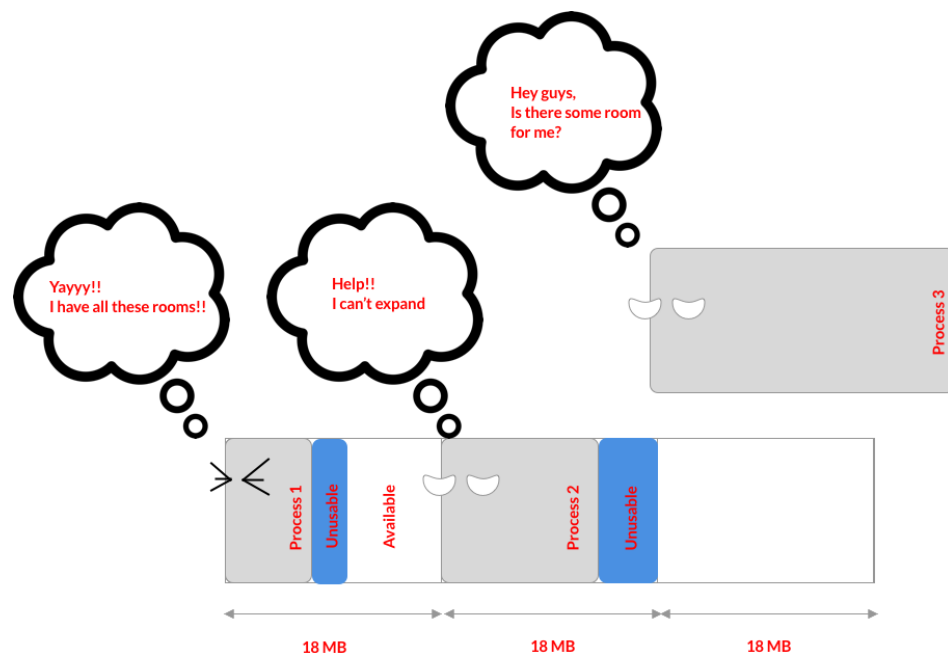   1) Tech Walla: What Is the Difference Between Virtual Memory & Physical Memory?, link

- Memory Management

    - Is the process of controlling and coordinating computer memory, by assigning portions known as **blocks** to various programs [1]

    Refernces:

    1) Guru 99: Memory Management in OS: Contiguous, Swapping, Fragmentation & Physical Memory?, link

- Fixed Partitioning

- – Is the oldest and simplest technique to put more than one processes in the main memory. [1]
- – Divides memory into regions with fixed boundaries.
  - * Can be of equal size
  - * Or unequal size
- – Advantages: [1]
  - * Is easy to implement
  - * Requires lesser indirect computational power
- – Disadvantages:
  - * Memory is wasted if process is smaller than partition (**Internal Fragmentation**)
  - * Programmer must deal with programs larger than partition

Refernces:

1) Chegg Study: Fixed Partitions, link

- Dynamic Partitioning

- Paging

- Address Translation

- TLBS