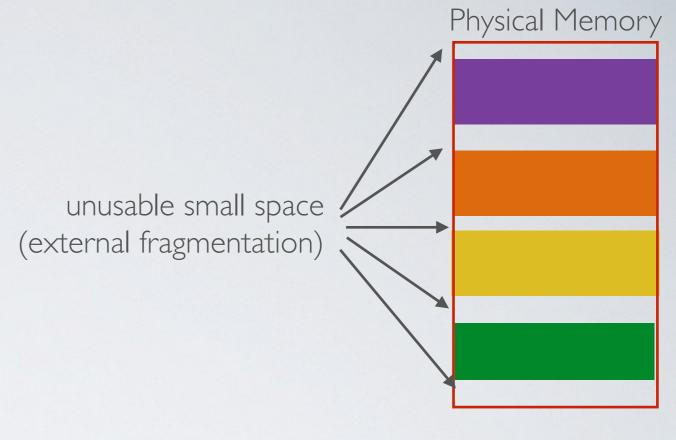
Segmentation Trade-offs



Advantages

- ✓ Multiple segments per process (sparse memory)
- √ Can easily share memory
- ✓ Do not need entire process in memory (swap)

Disadvantages

- Requires translation, which could limit performance
- Makes external fragmentation a real problem

Fragmentation

Fragmentation is the inability to use free memory

- → Over time
 - External fragmentation
 because of variables sized pieces (i.e many small holes)
 - Internal fragmentation
 because of fixed size pieces (i.e no external hole but
 internal waste of space)