pointer to the list of holes, which represents the current inventory of the memory resource. Adapt and incorporate the memory *request* and *release* functions developed as part of Project 3 (Main Memory). Processes may request new memory blocks by specifying their size and later release them.

3. Remove the restriction that all I/O requests will complete in the order of their submission. This requires keeping track of which I/O completion interrupt corresponds to which I/O request, which a real system must do. In this project, the *Request_IO()* must be extended to record the ID of the calling process. The *IO_completion()* function then specifies the process whose request has been satisfied.