

ESP_LEC_6

Memory leak occurs when programmers create a memory in heap and forget to delete it. Memory leaks are particularly serious issues for programs like servers which by definition never terminate. To avoid memory leaks, memory allocated on heap should always be freed when no longer needed.

Go through this link for good discussion points

<https://stackoverflow.com/questions/3373854/what-is-a-memory-leak>

Memory fragmentation is when most of your memory is allocated in a large number of non-contiguous blocks, or chunks - leaving a good percentage of your total memory unallocated, but unusable for most typical scenarios. This results in out of memory exceptions, or allocation errors (i.e. malloc returns null).

<https://stackoverflow.com/questions/3770457/what-is-memory-fragmentation>

Additional material

valgrind

<https://www.valgrind.org/docs/manual/quick-start.html>

basic valgrind tutorial

<http://cs.ecs.baylor.edu/~donahoo/tools/valgrind/>