Storage Warehouse

There is a warehouse that contains fragile and Non-fragile crates. There are X number of workers who will only be able to use 6 handcarts to move the crates, these handcarts have a maximum weight of 40 pounds. Each individual crate will be given a random weight so there is a limit to the number of crates that can be placed on the handcart. The fragile crates take priority.

Crate Class – int weight, string priority

CreateCrate() – creates a crate object with random weight and priority

TakeCrate() – workers will take crate using one of the 6 handcarts (indicated by decrementing a counter). It will take some time so the thread will be put to sleep for a 2 number of seconds.

ReturnHC() – increment the handcart by one.

Scheduling: whenever given the chance, the fragile crates must be the first ones out. Starvation is not taken to account in this case.

Notes:

Work method should only make the crates and assign numbers to the crates. After the creation of the threads, the Take.Crate function and priority ordering should execute.