



3. Avatar Gold Transfer

ALL

You're working on the server for an RPG. The following is a declaration and definition of an Avatar class which includes a static function that transfers gold from one Avatar to another.



The return from the transfer function indicates if the transaction completed successfully. The transfer can fail if the Avatar that gold is being transferred from doesn't have enough gold OR if the Avatar that gold is being transferred to has too much gold.



During development of the RPG, the server was made multi-threaded so that it could take advantage of multi-core, multi-processor servers.

Given the declaration of a Lock below, modify the Avatar class by implementing public API of the Avatar class below so that the movement of gold is thread-safe in a multi-threaded environment.

The lock is re-entrant, it can be acquired multiple times by the same thread. You can take advantage of the "id" field which is a unique integer to avoid deadlocks if necessary.

Language: C++14 ⓘ Environment

⌚ Autocomplete Loading...

