BIM306 Operating Systems

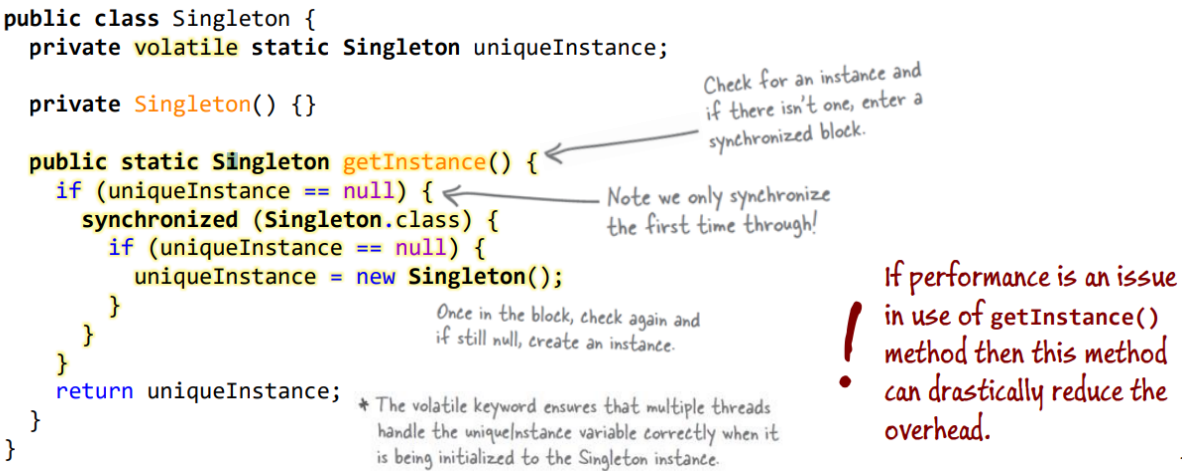
Project-2

Singleton Pattern

Due: June 6, 2021

Background

The Singleton pattern ensures a class has only one instance and provides a global point of access to it. One of the pattern implementations is double-checked locking. Implementation of the pattern in object-oriented programming is given:



Project Definition

In the project, first, you are asked to implement the getInstance method according to the double-checked locking using C programming language (POSIX library) to the given template code. Also, you should use semaphore. This will not be the same as the object-oriented version naturally, but the idea is the same.

Second, you should explain your code how to implement it step by step.