

Race Condition

A Race condition is when two different threads are doing concurrency and access some shared variable at the same time. Since both threads are reading and writing to the same variable, it will cause them to change the value at the same time and corrupt the variable by giving you the wrong calculated value. One example of a race condition is when you put the main thread to sleep and hope for the best that the other thread changes the value before the main thread wakes up and does something with it. To prevent this you have to use some locking mechanism on the thread, where the main thread waits until the other thread is done changing the value.