# CWE Detail – CWE-820

## Description

The product utilizes a shared resource in a concurrent manner but does not attempt to synchronize access to the resource.

## Extended Description

If access to a shared resource is not synchronized, then the resource may not be in a state that is expected by the product. This might lead to unexpected or insecure behaviors, especially if an attacker can influence the shared resource.

## Threat-Mapped Scoring

Score: 1.8

Priority: P4 - Informational (Low)

## Common Consequences

**•** Impact: Modify Application Data, Read Application Data, Alter Execution Logic — Notes:

## Demonstrative Examples

**•** One might expect the code to print out something like:

## Notes

**•** Maintenance: Deeper research is necessary for synchronization and related mechanisms, including locks, mutexes, semaphores, and other mechanisms. Multiple entries are dependent on this research, which includes relationships to concurrency, race conditions, reentrant functions, etc. CWE-662 and its children - including CWE-667, CWE-820, CWE-821, and others - may need to be modified significantly, along with their relationships.