

Important Concepts in Concurrent Programming (from wikipedia)

- Concurrency / Parallelism : logically / physically simultaneous processing
- Synchronization
 - coordination of simultaneous events(threads/processes) in order to obtain correct runtime order and avoid unexpected race condition.
- Mutual Exclusion
 - ensuring that no two processes or threads are in their critical section at the same time
- Critical Section
 - a piece of code that accesses a shared resource (data structure or device) that must not be concurrently accessed by more than one thread of execution
- Race Condition
 - a type of flaw in an electronic or software system where the output is dependent on the sequence or timing of other uncontrollable events.