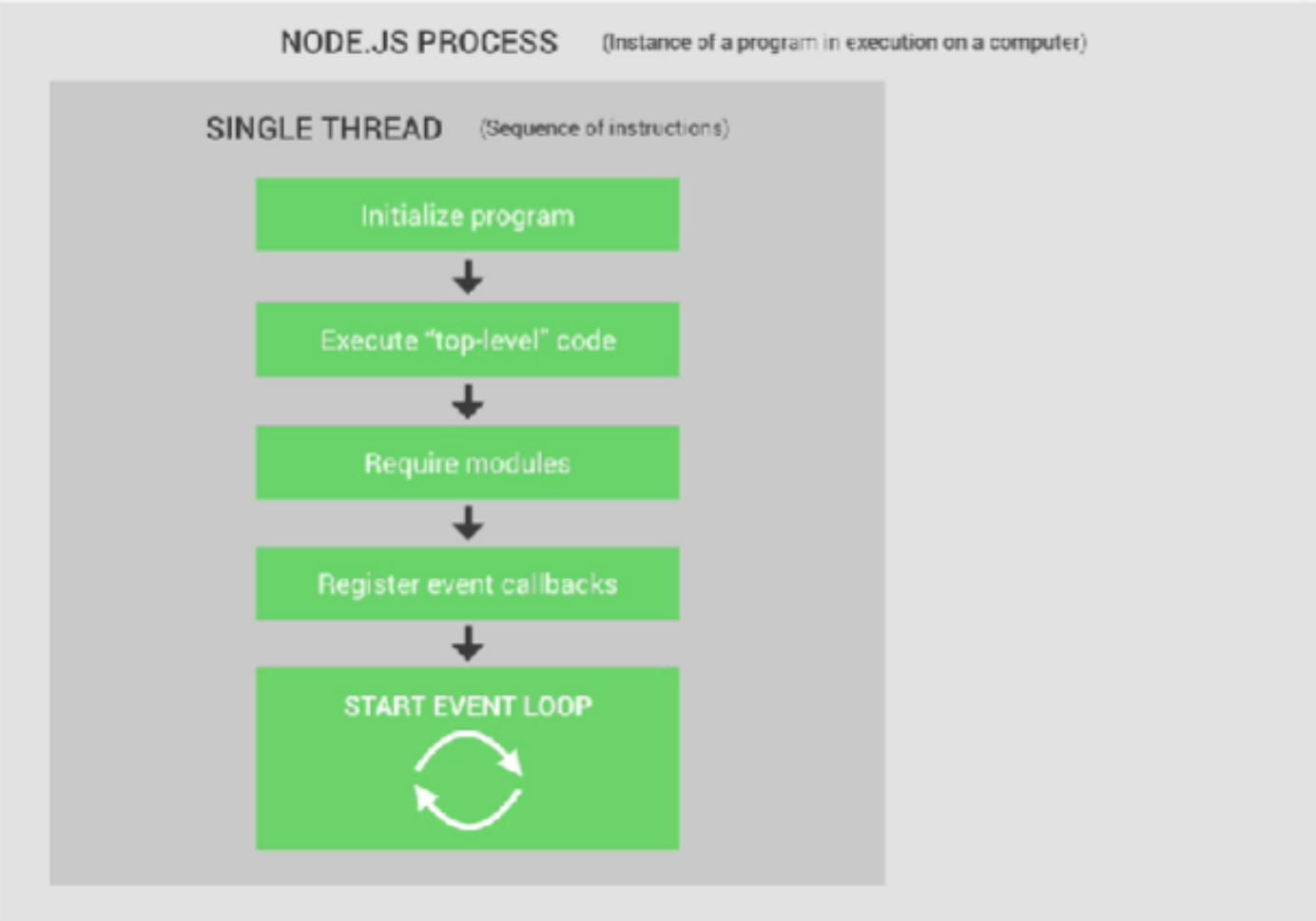
2. Processes, Threads & Thread Pool

Friday, May 24, 2024 11:42 AM

Node.js = a process running a C++ program

Single Thread = A box running in a computer
We must be very careful for not blocking our only Thread

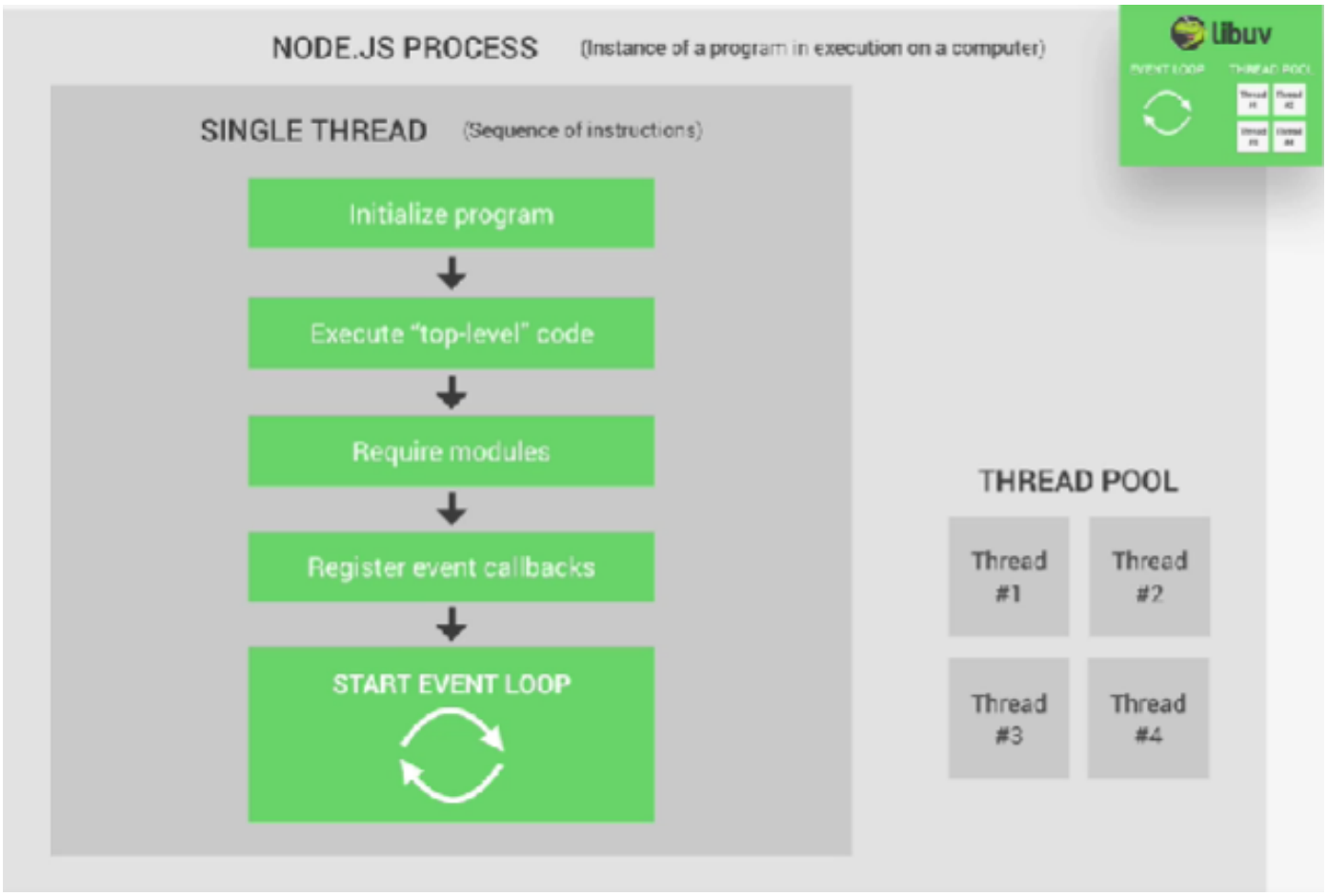


Some tasks registered in the Event Loop may be too heavy or expensive (CPU & RAM) draining to execute, thus blocking the Event Loop

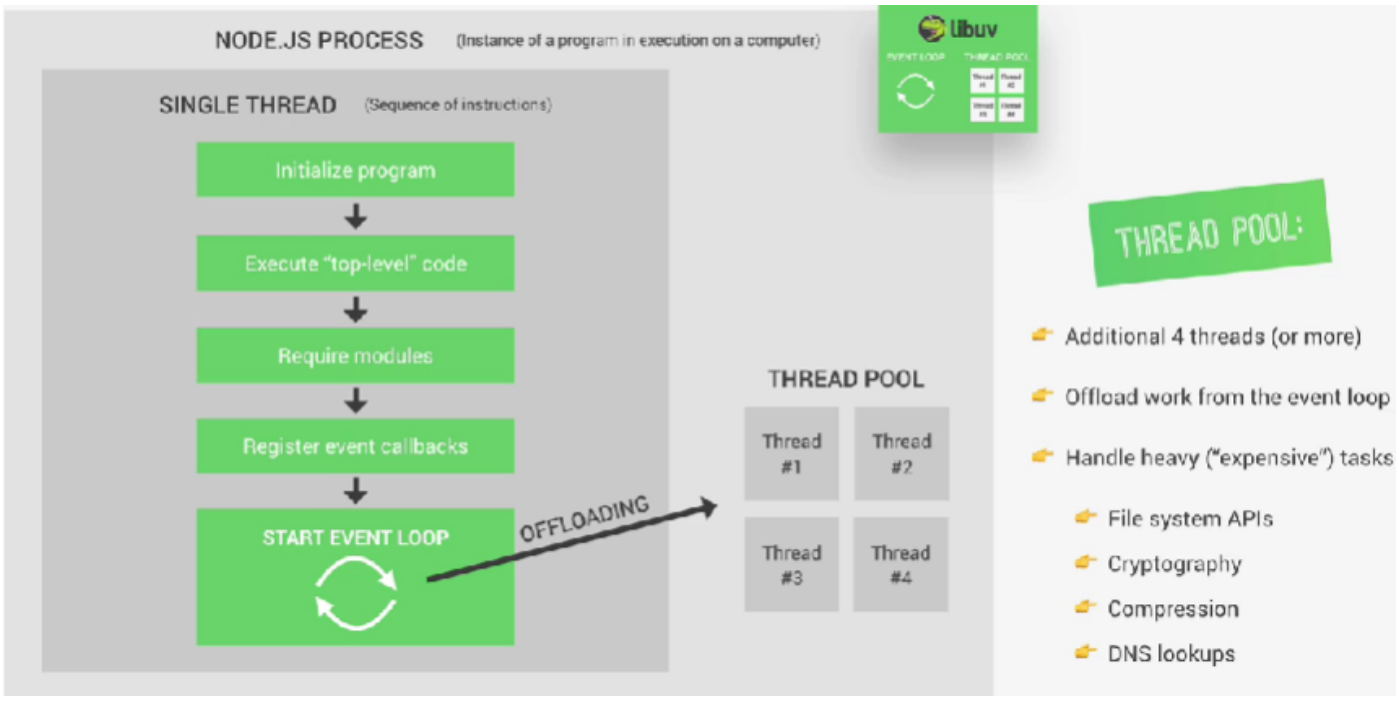
Libuv library provides us a **Thread Pool**
Thread Pool gives 4 additional threads (or more)
which is completely separated from our single thread

Max Thread = 128 Threads

Max. Thread = 128 Threads



Event Loop can automatically offload heavy tasks to Thread Pool
to avoid Block our Event Loop



File System APIs e.g. fs.writeFile() to extract users' input into files saved on host machine
Cyptography e.g. Bcrypt to hash passwords
Compression
DNS lookups