**Idempotency:**

Idempotency means clients can make the same call repeatedly and produce the same result.

Convert blocking calls to a non-blocking execution.

Lift off I/O operations from the execution thread to the system's kernel.

Since most modern kernels are multi-threaded, they can handle multiple operations executing in the background

concurrently. When one of these operations completes, the kernel notifies the main thread and then the appropriate callback

is eventually executed.