Concurrency in OCaml

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What is Concurrency?

A concurrent program is the one which can run to produce optimal results even when it is not executed sequentially. It involves splitting a computation into concurrent pieces called 'Concurrent Modules'.

Process v/s Thread

Process

An isolated instance of a running program.

Thread

A thread is a portion of execution.

The two types of threads

User-level | **Kernel-level**

Goal

Create functions to deal with threads

Try out a locking mechanism

Approach

After trying to start implementation on our own, we examined the actual OCaml source code and saw that threads were implemented by wrapping C and OCaml together. We tried to do the same and understand how to do it.

Functions

- Thread create
- Thread join
- Thread self
- Thread exit
- sem_create
- sem_wait
- sem_post
- sleep

What we did...