6-swanodette-10K-processes

Benefits

In this exercise you'll gain understanding of the following:

- how to use core.async to separate out the calculation and display parts of your code
- how to use core.async to send a queue of updates to the display layer

Assumptions

- You have Leiningen installed.
- You have an internet connection (if you don't have this – then we can copy the maven archive across)
- You have worked through the previous exercises

Code to Read

- `lambdajam-2014-core.async-workshop\6-swanodette-10K-processes\10,000 Processes.html` (view in web browser)

Things to Note In the Code

1. this is a copy of the page code by David Nolen at `http://swannodette.github.io/2013/08/02/100000-processes/`
2. we're not editing the code – just reading it, to keep things simple
3. the code is kicked off by the `let` block at the bottom
4. the `render-loop` function returns a channel of length 1000 to the `let` block called `in`
5. the `render-loop` function has an empty core.async queue called `refresh`
6. the first `go` block is in the `render-loop` function
7. the second `go` block is in the `let` block at the bottom
8. the `render!` function takes a queue that is not a core.async queue
9. the let block puts items on the in queue which are a sequence of `[random-cell-id random-colour]`
10. the `render-loop` function reads the core.async queue `in` and an empty queue called `refresh` and then pushes a non-core.async queue called `queue` to the `render!` function
11. the `render!` function sets a cell's value and colour by reading the queue of items containing `[cell-id colour]`

Code Model

This is a quick way to understand what is going on in the code:

<insert diagram here>

Activities

1. Open the page `lambdajam-2014-core.async-workshop\6-swanodette-10K-processes\10,000 Processes.html` in your web browser
2. Observe that there isn't a 'blockiness' or a 'scanning' effect in the updates.

Questions for Reflection

1. Do you think 'process' or 'worker' is a more helpful term to describe the individual go block instances running?