# 3-basic-multi-chan-example - multi-chan-core-async

#### **Benefits**

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

alts! functions and how it enables reading multiple queues

### **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 exercise

#### **Code to Read**

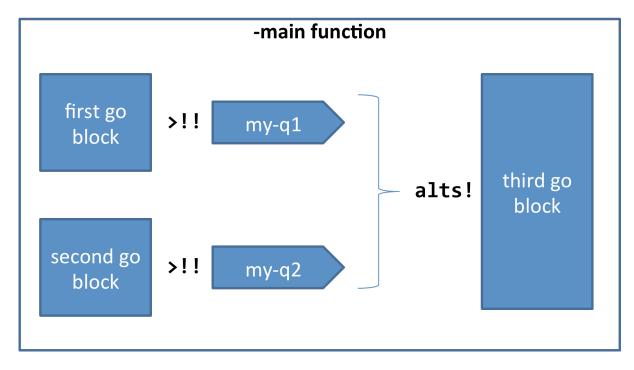
 lambdajam-2014-core.async-workshop\3-basic-multi-chan-example\multichan-core-async\src\multi\_chan\_core\_async\core.clj

### Things to Note In the Code

- 1. the three go blocks
- 2. the two queues created with the chan function
- 3. the sequence of queue items in the my-seq symbol
- 4. items being added to the first queue in the first go block
- 5. items being added to the second queue in the second go block
- 6. items being removed from both queues in the third go block using the alts! function
- 7. the timeout in the first and second go blocks
- 8. the absence of a timeout in the third go block
- 9. That the timeout in the second go block has a random interval with rand-int
- 10. That the third go block selects a path based on arbitrary queue choice

### **Code Model**

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



#### **Activities**

- 1. Run the code with lein run
- 2. Change the input to the rand-int function for the timeout duration in the second go block and run it again
- 3. Remove the rand-int function and make the input to the second timeout the same as the first and run it again

## **Questions for Reflection**

1. Assume you're writing Java code. How would you write code to wait to get the first result from the first of two queues?