

⚠️ This course has been archived (Saturday, 17 December 2022, 00:00).

Course

🏠 CS-E4110

📖 Course materials

📊 Your points

📖 MyCourses 🔗

✉ Zulip Chat 🔗



This course has already ended.  
The latest instance of the course can be found at: [Concurrent Programming: 2023](#)

« 1 Calculator -- A simple calculator using Akka actors. Course materials 3 Actors Lifecycle -- Understanding lifecycle of Akka actors. »

CS-E4110 / Round 4 - Concurrency frameworks / 2 Roundrobin -- Creating children and forwarding messages.

Assignment description

My submissions (3/10) ▾

## Roundrobin -- Creating children and forwarding messages.

### Roundrobin

An actor can create, or spawn, an arbitrary number of child actors, which in turn can spawn children of their own, thus forming an actor hierarchy. Actors in this hierarchy have a logical address and can be sent a message.

### Code

Download the assignment template [here](#)

### Task

In this exercise, we implement an actor called `class RoundRobin[A <: Actor : scala.reflect.ClassTag](numChildren: Int) extends Actor`. This actor should be able to create a number of children ( `numChildren` ) and enqueue them in an internal queue called `children`. For each message it receives, the `RoundRobin` actor should forward the message to the child found at the head of the `children` queue and move (enqueue) that child to the tail of the queue.

### Note

Akka Classic actor APIs are used instead of the newer Akka Typed actor APIs in the exercise.

### Hint

You can find more information [here](#) and [here](#).

📄 RoundRobin.scala

Choose File

No file chosen

Submit

Earned points

25 / 25



#### Exercise info

**Assignment category**  
Programming exercises

**Your submissions**  
3 / 10

**Deadline**  
Wednesday, 1 December 2021, 14:00

**Late submission deadline**  
Wednesday, 8 December 2021, 14:00 (-30%)

**Total number of submitters**  
51

« 1 Calculator -- A simple calculator using Akka actors. Course materials 3 Actors Lifecycle -- Understanding lifecycle of Akka actors. »