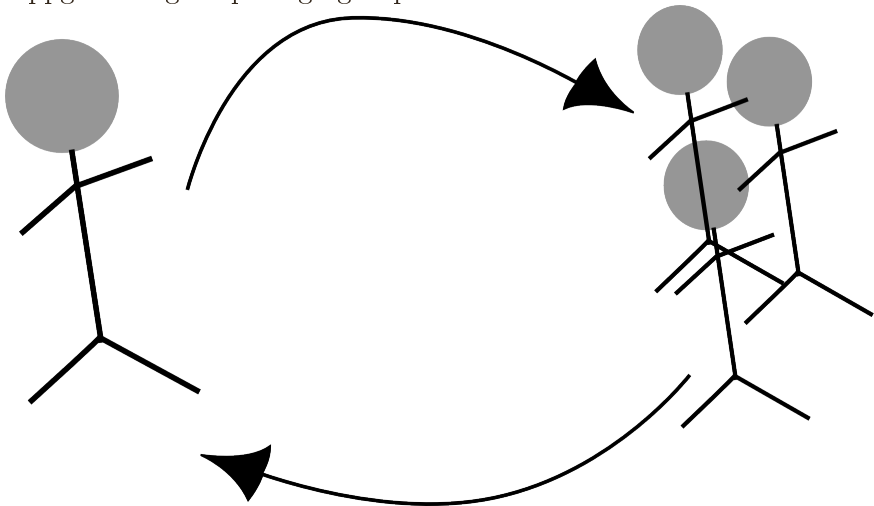# Actors

....

Scala -actors

13. november 2010

BEKK
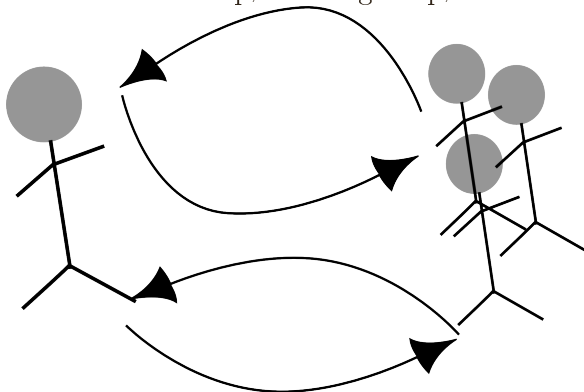
Oppgave: Lag et quizlag og implementer det som en actor

Quiz på vanlig måte, med en liten vri

1. Be om et spørsmål og få spørsmål

2. Svar på spørsmålet og få vite om det er riktig

Actors - hva er greia

Wikipedia:

> In computer science, the Actor model is a mathematical model of concurrent computation that treats "actors"as the universal primitives of concurrent digital computation: in response to a message that it receives, an actor can make local decisions, create more actors, send more messages, and determine how to respond to the next message received. The Actor model originated in 1973. It has been used both as a framework for a theoretical understanding of concurrency, and as the theoretical basis for several practical implementations of concurrent systems.

Wikipedia:

> ... concurrent computation ... in response to a message that it receives, an actor can make local decisions ... and determine how to respond to the next message received. The Actor model originated in 1973. ...
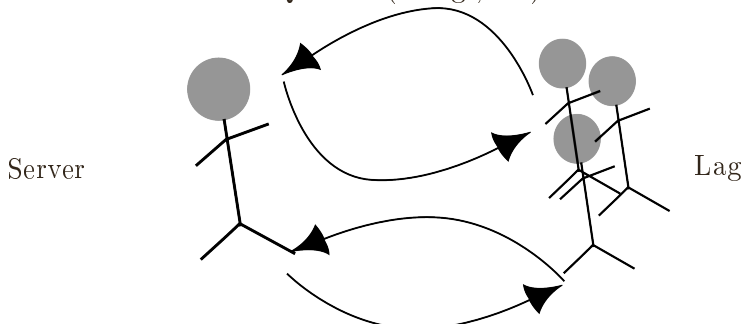
```scala
case class Tick

class Counter extends Actor {
  private var counter = 0

  def receive = {
    case Tick =>
      counter += 1
      println(counter)
  }
}
```
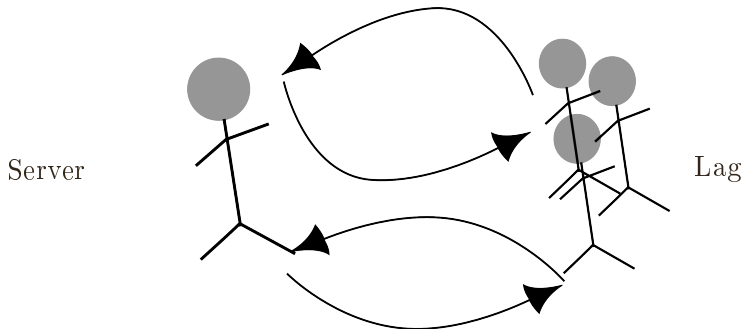
1. MoreQuestions(new Team("lag en"))
2. Question("Ping", Nil)

Server   Lag

3. Answer(question, "pong")
4. Correct()

```scala
case class MoreQuestions(val team:Team)
case class Question(val question:String, val content:Any)
```
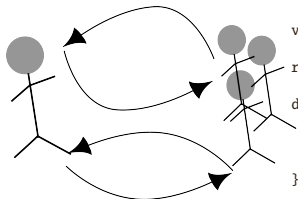

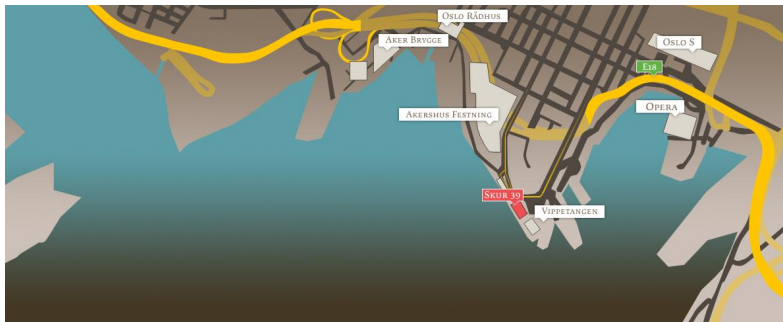Server   Lag

```scala
case class Answer(val team:Team, val question:Question, val answer:Any)
case class Correct extends Verdict
```

Actors - in action


```scala
val question = (remote !!
    MoreQuestions(team)).get.asInstanceOf[Question]
remote !! new Answer( team, question, giveAnswer(question) )

def giveAnswer(quiestion: Question)={
 question match {
   case x@Question("Ping", "") => "pong"
 }
}
```

Oppgave

OSLO RÅDHUS
AKER BRYGGE
OSLO S
E18
AKERSHUS FESTNING
OPERA
SKUR 39
VIPPETANGEN

BEKK

Aslak Johannessen
Senior Consultant
982 19 249
aslakjo@bekk.no