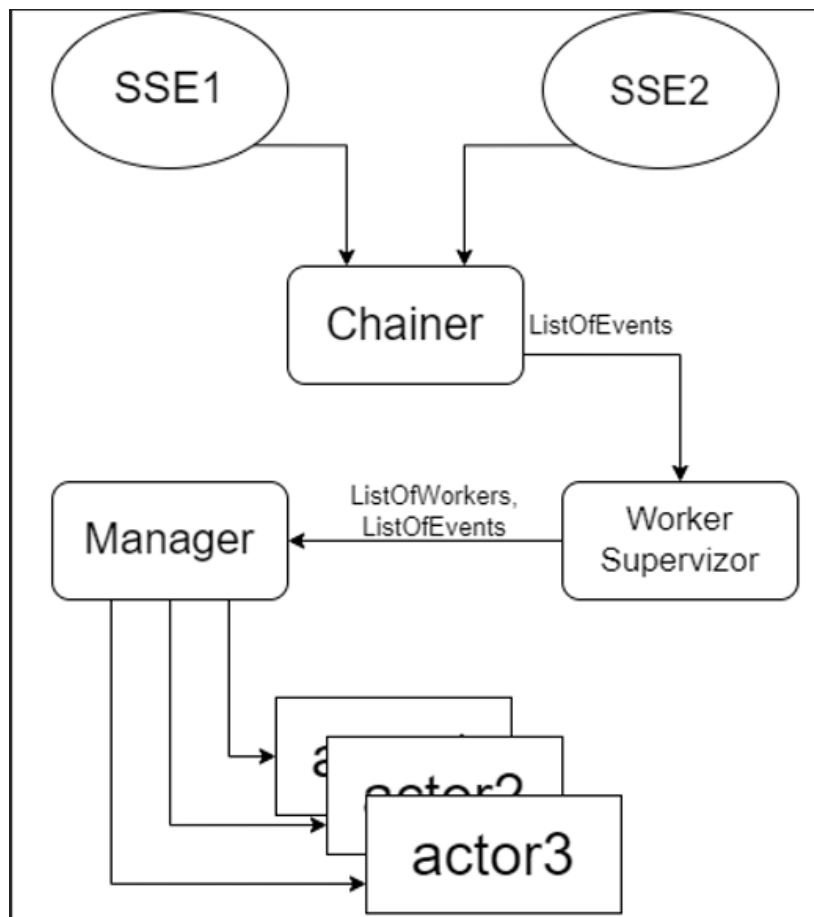


Checkpoint #1

For the first checkpoint, it was necessary to draw a diagram of the logic of the program for processing **SSE** tweets. I plan to use Scala as programming language and Akka as toolkit. The steps of the work are carried out as follows:

1. The so-called **Chainer** connects to two streams to receive event from them. Each of events is consisted of the message that contains JSON object there can be found different attributes such *"tweet"*, *"user"*, *"description"* and so on. Here events do not immediately go to be processed in another part of the program. The **Chainer** puts all the events it received in a second into the list-buffer and only then sends them to **Worker Supervisor**.
2. In **Worker Supervisor**, workers are created, the number of which depends on the number of events received from **Chainer** in a one-to-one ratio. This number of events is equal to length of the list-buffer. These workers are also placed in the list-buffer, and then sent along with events in list-buffer to the **Manager** at the same time.
3. The next step **Manager** iterates both buffers of workers and events that he received from **Worker Supervisor**. During the iteration, the **Manager** sends each worker its own message.



4. After receiving event, worker processes it by retrieving data and converting events to messages that are JSON object, and then self-deletes it.
5. Also, there is the **Main Supervisor** which creates some actors that there had been discussed above such as **Manager**, **Chainer** and **Worker Supervisor**.

