Homework 9: akka Actors

CSYE 7215: Spring 2017

In this project you will develop an akka program for counting the number of words in a set of text files. The approach must follow the akka actor model.

You will be given a collection of text files that will need to be installed on your computer. Your program will create a "User" actor whose main goal will be to access the directory in which the files are stored and get their access information, and then create one child actor for each file. The child actors will read the lines in their files and pass the lines to the child actors that they need to create. The role of these child actors will be to count the number of words in their lines. The line counts then need to be returned along the reverse path and aggregated. The User actor will then add the numbers from all the files and display the number of words in the whole file system.

In the development of this program you should use the Sequence Diagrams, as shown in the lecture slides. You can develop these diagrams in any drawing tool, e.g., PowerPoing or Visio. Or you can use a UML tool for that (all UML tools support creation of Sequence Diagrams). An example of a free UML tool is Star UML http://staruml.io/.

You will be given skeleton files which you will use for your project. You will also need to install akka on your system, as described in the lecture slides or in the akka documentation:

http://doc.akka.io/docs/akka/2.4/java.html#java-api

Submission

Submit a .zip file containing your project files to Assignments in Blackboard. The zip file you submit should have your name as the author. To enforce academic integrity, your code may be checked for similarity to other submissions.