TECHNISCHE UNIVERSITÄT DARMSTADT

TK1: Distributed Systems - Programming & Algorithms

3. Programming Assignment
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Micro Blog via JMS (20 P.)

Implement a Micro Blog System which handles the communication using the publish/subscribe paradigm. To implement the solution, use the Java Message Service (JMS). Any user of the system acts as producer and consumer at the same time.

Functional Requirements:

- Provide a (simple) graphical user interface (GUI)
- The GUI asks the user name to login on startup.
- Every user can publish messages and can add tags for every message.
- Every user can subscribe other users or tags.
- JMS coordination: There is no server anymore; each client manages its own blog and exchanges the related information with the other clients.

Non-functional Requirements:

- Apache ActiveMQ is already installed in the current version of the VM, which has to be used.
- Use the pre-installed Apache ActiveMQ Version 5.6.0 as message broker.
- To initialize and execute Apache ActiveMQ, run the following commands in the VM:

```
cd /etc/activemq/instances-enabled/
sudo ln –s ../instances-available/main
sudo /etc/init.d/activemq restart
```

- Use an ANT-Script to start two clients!
- We will start Apache ActiveMQ for your submission. Don’t start it in the ANT script.
- Use the Model-View-Control pattern for your implementation