
Lab 1: Remote message box

Write a messaging application that allows to exchange messages between users sharing the same messages box.

A message has the following properties:

- the sender name
- the message content (string)
- a method `void printMessage()` that displays the message content on the console that launched the program that hosts the message instance.

The server, launched with a port number as argument:

- create a remote object that stores messages, and allows to put/get messages
- export this object to a registry running at the given port number

The client, launched with a host name, a port number and a user name as arguments:

- lookup at the given host and port number in order to obtain a reference to the remote object,
- asks the user for commands to put/get messages to/from the remote message box

Write and compare two versions (*nb*: test the `printMessage` method):

1. the interface that represents the message instances is `Serializable`
2. the interface that represents the message instances is `Remote`

Make some more tests to better understand RMI (for both versions):

- add a static field to the message class to count the number of messages instances and display this static field in the `printMessage` method
- declare the message content attribute as `transient`