

Erlang Project

1. Installation

- Windows: Go to <http://www.erlang.org/download.html>, and download the appropriate version.
- Linux/Unix: Go to terminal and type: *sudo apt-get install erlang erlang-doc*

2. Assignment

1) Create a master node that will create nodes which represent users on a connected network. The master node will wait in a receive loop for instructions to create a user node using a given username. If a username is not given, the master node will assign the node one that is generated (*anonymous1*, *anonymous2*, etc). User nodes will wait in a receiving loop for instructions as well and will have the following capabilities:

1. They can toggle between an “offline” and “online” state.
2. They can send messages to and receive messages from “online” users (provided that they are “online” as well) via a direct connection, or through the master node (your choice). The initial connection to the user must be handled by the master node.
3. They can print their own chat history, which will be stored internally in a “To/From” fashion.
 - a) E.g. To nodeB: ‘Hello’
From nodeB: ‘Hey’
From nodeC: ‘How are you?’

Note: an “offline” user has no capabilities other than switching back to “online” (at which point they will have their history printing/storing and message passing capabilities restored). Also, an online user cannot send a message to an offline user. If an “online” user tries to message to an “offline” user, an appropriate message should be displayed by the master node (e.g. “Message could not be sent. nodeB is offline”). A similar approach should also be taken if a user tries to send a message to a nonexistent user.