CS 511 – Quiz 6: Message Passing in Erlang

11 November 2020

Names:
Pledge:

Exercise 1

You are asked to implement a guessing game. A server receives requests to play the game from clients. These requests are of the form `{From,start}`, where `From` is the Pid of the client, and `start` is an atom. The server should then:

1. generate a pseudorandom number in the range [0,10];
2. spawn a "servlet" process that plays the game with the client, providing the generated number to be guessed;
3. notify the client of the PID of the "servlet"; and
4. then receive new client requests.

Note that by spawning a servlet the server is always responsive to new game requests. The servlet should behave as follows:

- wait for guesses from the client of the form `{Pid,Number}`, where `Pid` is its Pid, and `Number` is the number the client is guessing.
- answer each message, indicating whether the client has guessed (`gotIt`) or not (`tryAgain`).

The client should keep guessing random numbers. Once it has guessed correctly, both client and servlet simply ends their execution.

You can use the function `rand:uniform(N)` for generating random numbers between 1 and N. Also, you may include helper functions.

```
-module(gg).
-compile(export_all).

start() ->
    S = spawn(fun server/0),
    spawn(?MODULE,client,[S]).

server() ->
    exit(incomplete).

client(S) ->
    exit(incomplete).
```