A QUICK ERLANG INTRODUCTION

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INVENTORY OF A NIGHTMARE

- Concurrent/Parallel/Distributed programming
- Dependencies
- Testing
- Documentation
- Security
- Portability


THIS IS FINE.

We will solve all problems with highly complex and "too smart for you" Oriented Object Paradigm even if you don't like rotten spaghettis.


THIS IS
NOT
FINE!!

- 30's: Church and the Lambda Calculus
- 40's: Turing and the Abstract Machine
- 1958: McCarthy and LISP
- 1972: Colmerauer/Roussel and Prolog
- 1973: Milner and ML
- 1985: Turner and Miranda
- 1986: Armstrong/Virding/Williams and Erlang
- 1990: A committee and Haskell
- 1995: Somogyi and Mercury
- 1996: Leroy and OCAML
- 2004: Odersky and Scala
- 2007: Hickey and Clojure

WHY ERLANG?

- Actor Model
- Distributed Language
- High Level Programming Language
- Stable
- Portable
- Answer Industrial Needs
- High Quality Standard

WHO USE ERLANG?

- Amazon
- Ericsson
- Cisco
- Facebook
- WhatsApp
- Github
- Rackspace
- and many more...

WHAT KIND OF PROJECT?

- Chef
- CouchDB
- RabbitMQ
- ejabberd
- Riak
- BarrelDB
- Yaws
- Wings3D

ERLANG FROM SOURCES

```
$ git clone https://github.com/erlang/otp.git
$ cd otp
$ ./otp_build release -a
$ ./bin/erl
Erlang/OTP 21 [erts-10.2] [source] [64-bit] [smp:2:2]

Eshell V10.2  (abort with ^G)
1>
```

ERLANG REPL

```
1> Function = fun(X) -> io:format("~p~n", [X]) end.
#Fun<erl_eval.6.128620087>
2> Function(test).
test
ok
3>
```

ERLANG MODULE

```erlang
-module(test).
-export([hello/0]).
-include_lib("eunit/include/eunit.hrl").

hello() ->
  io:format("hello world!~n").

hello_test() ->
  ?assertEqual(ok, hello()).
```

compile it

```
1> c(test).
{ok,test}
2> t:hello().
hello world!
ok
```

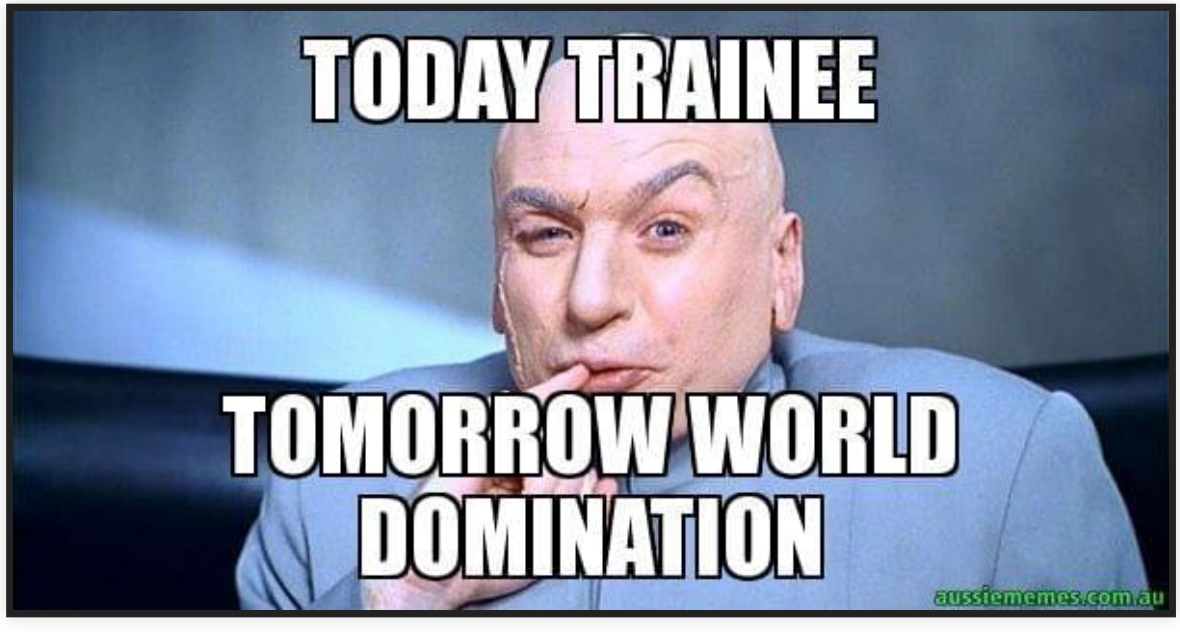
ERLANG ACTORS

```
1 -module(test).
2 -export([actor/0]).
3
4 actor() ->
5   receive
6     Data -> io:format("got: ~p~n", [Data]),
7             actor()
8   end.
```

compile it

```
1> c(test).
{ok,test}
2> Pid = erlang:spawn(fun() -> t:actor() end).
<0.82.0>
3> [{data, "test"}] ! Pid.
got: [{data, "test"}]
ok
```

Questions?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