

GENSERVER VS AGENT

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THIS TALK

- Introduction to GenServer (Erlang)
- Writing a GenServer (Erlang)
- Introduction to Agent (Elixir)
- Writing an Agent (Elixir)

WHAT IS A GENSERVER?

- A behavior
- An API for client/server
- A supervised (or unsupervised) process

WHY USE A GENSERVER?

GENSERVER API

```
start_link() ->
    gen_server:start_link({local, my_server}, ?MODULE, [], []).

init([]) ->
    {ok, #{} }.

handle_call({action, Arg1, Arg2}, _From, State) ->
    ...
    {reply, {ok}, NewState}.

handle_info(Msg, State) ->
    ...
    {noreply, State}.

terminate(normal, _State) ->
    ...
    ok.

code_change(_OldVsn, State, _Extra) ->
    {ok, State}.
```

CODE DEMO

WHAT IS AN AGENT?

- A module that implements GenServer
- A wrapper around state
- A supervised (or unsupervised) process

As defined in [Elixir docs](#)

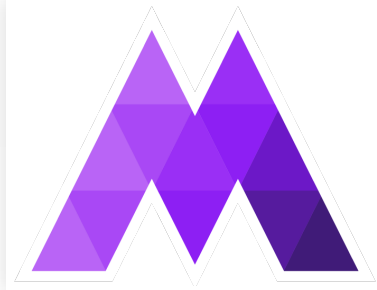
Agents provide a segregation between the client and server APIs (similar to GenServers). In particular, the anonymous functions given to the `Agent` are executed inside the agent (the server). This distinction is important because you may want to avoid expensive operations inside the agent, as they will effectively block the agent until the request is fulfilled.

CODE DEMO

QUESTIONS?

Slide source: [GitHub](#)

Thanks to



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