

# What happens if a method call crashes?

- The whole server will crash! Not good



Lister: "I'm going to use my brains for the first time in my life."

Kryten: "Considering the circumstances, sir, do you really believe that's wise?"

```

1  defmodule NameServer2 do
2    @moduledoc """
3      Very simple name server supporting transactions:
4      - In the event of a crash, the caller is sent a message.
5      - All other processes using the server will not be affected.
6    """

```

## Interface

Functions called by the process using the server.

```

7  def start(name) do
10 end
11
12 def rpc(name, request) do
18 end

```

```

19
20 def loop(name, state) do
21   receive do
22     {from, request} ->
23     try do
24       {response, newState} = handleRequest(request, state)
25       send(from, {name, response})
26       loop(name, newState)
27     rescue
28       thrown_value ->
29         send(from, {:exception, "#{inspect(thrown_value)}"})
30         loop(name, state)
31     end
32   end
33 end

```

## Server

Runs in the server Process.

```

34
35 defp handleRequest({:add, name, place}, state) do
38 end
39
40 defp handleRequest({:find, name}, state) do
42 end
43
44 defp handleRequest({:crash, name}, state) do
45   1 / 0
46   {state[name], state}
47 end
48 end

```

## Implementation

Functions called by the server process to implement the server logic.