

U6FFD2QG0 : yeah, basically

U3SJEDR96 : I would suggest taking the contents of your `TimeDone` branch, putting it into a separate function, and replace that with```

```
TimerDone -&gt;
```

```
  timerDone model
```

```
Tick newTime -&gt;
```

```
  if .activeTime (decTimer model) &gt; 0 then (newTime, Cmd.none) else timerDone model
```
```

U0LPMPL2U : I'd suggest extracting the common logic to a helper function and calling that from both branches instead of trying to send a `Msg`

U6FFD2QG0 : fair enough. Is this just not a typical way that a Cmd would be used?

U0LPMPL2U : You almost never want to just send Msg to yourself

U0LPMPL2U : Msg is meant to represent events from the outside world

U3SJEDR96 : No, a `Cmd msg` represents something for the runtime to execute asynchronously, after which it can call your `update` with the resulting `Msg`

U6FFD2QG0 : ok, that's good to know

U6FFD2QG0 : thanks!

U3SJEDR96 : you don't really need the runtime in order to call a function, though, so using a function to abstract the behaviour of "what should happen when your timer is done" is definitely the recommended approach

U37HUSJ4R : If I wanted to make this more generic:```

```
updatePaused : Bool -> Call -> Call
```

```
updatePaused newValue ({ controls } as call) =
```

```
 { call
```

```
 | controls =
```

```
 Maybe.map
```

```
 (\controls -> { controls | paused = newValue })
```

```
 call.controls
```

```
 }
```

```
```
```

U37HUSJ4R : so for example `paused` could be any field

U3SJEDR96 : There is no generic record-updater syntax; sadly

U37HUSJ4R : :cry:

U37HUSJ4R : So if I have `hold`, `pause`, `hangup` for example I need 3 functions and 24 lines of code :disappointed:

U3SJEDR96 : Not entirely true; but there's another thing... Can a call be simultaneously on hold, paused and hung up?

U37HUSJ4R : this is more state of the buttons

U37HUSJ4R : so if I call is on hold then the state is

U37HUSJ4R : ```paused : True,

hangup : True,

paused : False

```
```
```

U37HUSJ4R : but yes it could be all three

U37HUSJ4R : multiple different valid states here

U3SJEDR96 : I'd try to think of a better way to model those, though. In the meantime, you can use something like ```

```
updateControls : (Controls -> Controls) -> Call -> Call
```

```
updateControls op call =
```

```
 { call | controls = Maybe.map op call.controls }
```

```
```
```

U37HUSJ4R : I'd LOVE a better way to model these

U37HUSJ4R : but really can't think of one :disappointed:

U3SJEDR96 : ```updatePaused : Bool -> Call -> Call

```
updatePaused newValue call =
```

```
  updateControls (\controls -&gt; { controls | paused = newValue }) call
```

```
```
```

U3SJEDR96 : you'd still end up with 15 lines of code, including annotations, but it would be pretty clear what they all did. And if you decided that `call.controls` should be a `Result` rather than a `Maybe`, that's only a single line to change

U3SJEDR96 : as for your control-states.. I think having a `Status = Ongoing | Paused | OnHold | Hangup` (or something similar, depending on requirements) would make sense, with functions `canPause : Status -> Bool` etc

U3SJEDR96 : Though it might make sense for a call to be both onhold and paused, in which case that would be a fifth case