```
U5QPUBDQR: ({ model | captions = List.map updateVideo model.captions, debug = b },
U5QPUBDQR: ie update the model, from the model?
U3SJEDR96: I'm not sure what you mean by that. `update` returns a _new_ model, and _usually_ that's based on your
previous state
U3SJEDR96: so using your previous model to build a new one makes perfect sense
U5QPUBDQR: <@U3SJEDR96> a yes: immutability takes some getting used to
U3SJEDR96: yeah, it's important to realize that `{ foo | v = "val" }` creates a _new_ record )
U5QPUBDQR: <@U3SJEDR96> thanks. I'm very happy with this slack channel, good help available
:slightly smiling face:
U57KYFW67: It's not possible to include two .js files created by Elm on one page, is it?
U50SABLHE: How would I Json. Encode an array of objects to be used in a request body? Below is an example of
what I need to send.
ſ
     "request-id": 1,
     "action-name": "checkZipCode",
     "zip-code": "41501"
I'm using the following code to Encode the object, but I'm not sure how to add the surrounding array brackets
encodeZipCode: Encode.Value
encodeZipCode =
  Encode.object
    [ ( "request-id", <http://Encode.int|Encode.int> 1 )
    , ( "action-name", Encode.string "checkZipCode" )
    , ( "zip-code", Encode.string "41501" )
    ]
U3SJEDR96: ```encodeZipCode: Encode.Value
encodeZipCode =
  Json.Encode.list
    [ Encode.object
       [ ( "request-id", <http://Encode.int|Encode.int> 1 )
       , ( "action-name", Encode.string "checkZipCode" )
       , ( "zip-code", Encode.string "41501" )
    ]
U3SJEDR96: that should work. Alternatively, this should also work: ""
encodeZipCode: Encode.Value
encodeZipCode =
  Encode.obiect
    [ ( "request-id", <http://Encode.int|Encode.int> 1 )
    , ( "action-name", Encode.string "checkZipCode" )
    , ("zip-code", Encode.string "41501")
    |> List.singleton
    |> Json.Encode.list
U3SJEDR96: so basically, wrap it in a list, and encode that with 'Json.Encode.list'
```

U50SABLHE: <@U3SJEDR96> Thanks, that was exactly what I needed.
U59AF21LJ: <@U3SJEDR96> Sorry for the late reply. I actually see that as a problem, because sometimes it doesn't refresh with the value the model provides and just keeps the one the user wrote instead.

U5WD40ZA9: Anyone know any recent examples of someone creating a dropdown so that when you click outside of it, it closes? Would be really helpful, thanks in advance: slightly\_smiling\_face:!

U4PT7NG4V: I've always just put an invisible overlay over the background behind popups and handled the click there and dismiss the popup. But maybe I'm old school and there's a better way

U0K92QFST: <@U5WD40ZA9> there was \*just\* a discussion about exactly this in <#C13L7S5GR|elm-dev>!

U0K92QFST: <a href="https://ellie-app.com/3tm2WSV9JTza1/0">https://ellie-app.com/3tm2WSV9JTza1/0</a>

U0K92QFST: credit where due: <a href="https://elmlang.slack.com/archives/C13L7S5GR/p1498165749675291">https://elmlang.slack.com/archives/C13L7S5GR/p1498165749675291</a>

U5WD40ZA9 : <@U0K92QFST> I'll take a look! Thank you very much :+1:

U4PT7NG4V: That's really neat:slightly\_smiling\_face:

U2W8J47KQ: I'm curious how that's listening for the "outside" clicks, it's not super obvious to me

U2W8J47KQ: oh it's looking for focus change events, neat

U4PT7NG4V: Kinda neat code wise, makes it difficult to inspect the popup in dev tools though

U2W8J47KQ: I always have that problem with styling popups/dropdown/etc, chrome hover/focus toggle helps some U3SJEDR96: <@U59AF21LJ> that's a problem if the part of your model that should match the input field is modified in any way \_other\_ than through the input field. One reason to do it the way it's done in the guide, is to prevent the cursor from jumping if you type faster than your (`update` loop can process + a render can be queued through requestanimationframe, and your updated model is finally rendered), which takes about ~16ms at most. Especially

requestanimationframe, and your updated model is finally rendered), which takes about ~16ms at most. Especially noticeable if your cursor isn't at the end of the input :wink:

U3LUC6SNS: Is there a way of putting user-defined modules in Ellie?

U23SA861Y: publishing them first?

U3LUC6SNS: I would say that mathematics is more about manipulating structures, of which the integers, the real numbers, etc., are particular examples.

U3LUC6SNS: I suppose so, but the modules I have in mind are of little value outside of the example. Seems like littering: slightly\_smiling\_face:

U23SA861Y: well it looks like it can install things which the elm package manager can find

U23SA861Y: well it's either big enough to be a package (which you maybe can publish) or its small enough to inline into a single page

U3LUC6SNS: Where is `Msg` defined?

U3LUC6SNS: <@U23SA861Y> can I inline a module, that is, include its text in the "Main.elm" file?

U23SA861Y: Msg is defined wherever you defined it...

U23SA861Y: its just code, the import prefixes might need to be rewritten but there is nothing that stops you from moving that code around. (with the exception of circular imports)

U3LUC6SNS: Got it!: slightly smiling face:

U23SA861Y: The only think that actually needs to be a seperate modules is ports I believe

U236M9FH9: ports don't have to be in a separate module, but it's best as every port has the same namespace so a single module can help prevent name collisions.

U23SA861Y: umm I thought you needed a special `port module` declaration

U236M9FH9: You do, but you can have multiple modules with that declaration

U236M9FH9: And other elm code can live in that module

U23SA861Y: It can but I don't think that module can be toplevel

U23SA861Y: I don't think your main module can be a port module

U23SA861Y: huh, nvm that works in ellie

U23SA861Y: stand corrected

U3LUC6SNS: I posted the following in the `style-elements` channel, but it concerns a general Elm bug, so I am posting it here as well:

I made a small project that demonstrates the textarea bug. See the README for details. To run the project, do `git clone <a href="https://github.com/jxxcarlson/nanoedit">https://github.com/jxxcarlson/nanoedit</a>`, bring up `elm-reactor`, and select `Main.elm`. I'm very interested in finding a solution or workaround for this. :slightly\_smiling\_face:

U5Y4ERBU0 : hello! I'm trying to use a guard with the code below, but the compiler tells me it can't find the "|=" or "=>" variables. Anyone know why?

""getValidationMessage: Model -> String

getValidationMessage { password, passwordAgain }

= password /= passwordAgain => "Passwords don't match."

|= "OK"```

U2FGMAQ5R : Does anybody know how I can use a Set with a custom type? I'd like a collection that only contains unique entries but Set only works with primitives

U0LPMPL2U : <@U5Y4ERBU0> it sounds like you're trying to write Haskell. Elm doesn't have "guards". :slightly\_smiling\_face:

U0LPMPL2U: You can write this as an if/else statement or a case statement

U5Y4ERBU0: i tried to emulate this <a href="http://package.elm-lang.org/packages/Fresheyeball/elm-guards/1.0.1/Guards">http://package.elm-lang.org/packages/Fresheyeball/elm-guards/1.0.1/Guards</a>

U5Y4ERBU0 : do I need to import something? U0LPMPL2U : Are you trying to use that package?

U5Y4ERBU0: <a href="http://package.elm-lang.org/packages/Fresheyeball/elm-guards/latest">http://package.elm-lang.org/packages/Fresheyeball/elm-guards/latest</a>

U5Y4ERBU0: i guess so

U0LPMPL2U: if so, you will need to install the package: `elm package install Fresheyeball/elm-guards` on the

command line