

U5QJW0DDE : I look forward to watching that.

U2LAL86AY : there is a small article about extensible records here. I can't find the other one i saved once - was much better at explaining how to compose extensible records.

<<https://dennisreimann.de/articles/elm-data-structures-record-tuple.html>>

U2LAL86AY : ok let check it out

U2LAL86AY : i simplified a bit:``

```
type alias WithUserFields a =
```

```
  { a | name : String }
```

```
type alias UserFields =
```

```
  WithUserFields {}
```

```
userFieldsFrom : String -> UserFields
```

```
userFieldsFrom string =
```

```
  WithUserFields string
```

```
...
```

```
error:
```

```
...
```

```
Cannot find variable `WithUserFields`
```

```
...
```

U2LAL86AY : so it seems like you can't have parametric types act as constructors

U3ZNWN526 : Oh, no, I have `UserFields` as the constructor within that last function, not `WithUserFields`

U2LAL86AY : Maybe is the same thing - since it gives the same error.

if you have `type alias Thing = String`

you get back a function named `Thing : String -> Thing`.

But if you have `type alias Thing a = String`

Seems you don't have this `Thing: String -> Thing` anymore. It's how elm works.

Let me try a few more things first

U3ZNWN526 : Ooh, so you think even with `type alias Thing = MetaThing {}` maybe wouldn't give you the constructor?

I suppose that's possible... very unexpected though, and doesn't seem to be documented anywhere

U3ZNWN526 : I would think with a `type alias Thing =` I could put anything after the `=` and it would give me a constructor.

U5J0H2NS2 : I think this``

```
WithUserFields a = { a | ... }
```

```
...
```

means only, that the type has several known fields.

You did not specify their order. So you can not construct one just like you wanted.

U2LAL86AY : hmm yes, you don't get alias constructors for aliases with parametric values:``

```
type alias FirstAlias =
```

```
  { name : String }
```

```
type alias SecondAlias a =
```

```
  { a | name : String }
```

```
constructAValueOfFirstAlias : String -> FirstAlias
```

```
constructAValueOfFirstAlias string =
```

```
  FirstAlias string
```

--- works as expected because you have in the global scope a (function/variable) named: FirstAlias : String -> FirstAlias

```

constructAValueOfSecondAlias : String -&gt; SecondAlias {}
constructAValueOfSecondAlias string =
  SecondAlias string
  -- error "Cannot find variable `SecondAlias`"
...

```

U3ZNWN526 : Oh well yes, that does make sense, because SecondAlias is not a type, you would only be able to construct other types using SecondAlias. But what I'm trying to do is define a second type and then use it!

```

U0J1M0F32 : ``
type SecondAlias a =
  SecondAlias { a | name : String }

```

```

constructAValueOfSecondAlias : String -&gt; SecondAlias {}
constructAValueOfSecondAlias string =
  SecondAlias { name = string }
...

```

```

U5J0H2NS2 : But this works``
type alias WithUserFields a = { a | name : String, email : String }
type alias UserFields = WithUserFields {}

```

```

change_name : String -&gt; UserFields -&gt; UserFields
change_name new_name user_fields = { user_fields | name = new_name }

```

```

get_user_fields : String -&gt; String -&gt; UserFields
get_user_fields name email =
  { name = name, email = email }
...

```

U3ZNWN526 : Yeah. That seems right. The problem I'm having is that for some reason... there's no `UserFields` constructor? (even though `UserFields` is just a plain old type alias)

U0CL0AS3V : > all the structural problem i've been discussing started to surface in my company's app after it hit about 8000 lines of clojurescript (which have since doubled). I think none of the issues I present would be that apparent in smaller apps> really the problems i'm talking grow exponentially with the size of your data model

we're at 150,000 lines of Elm code in production and these problems don't exist for us. I don't worry about the Elm Architecture scaling because my experience with it is that it's scaled better than any other front-end system I've ever worked on. :slightly_smiling_face:

U5QJW0DDE : Currently it is 15k lines. Do you find that either a) your data model lines up with your view tree much of the time or b) you pass the whole model state around often?

U0CL0AS3V : <@U5QJW0DDE> I get why you'd be worried about this, based on your experiences elsewhere, but the people saying "this is not a problem in Elm" are not making it up :wink:

U5QJW0DDE : <@U0CL0AS3V> I still haven't seen any examples that demonstrate an Elm solution to, for example, the distant descendant drop down list I mentioned earlier

U0CL0AS3V : can you link me to that? I'm catching up

U3ZNWN526 : Aha! <<https://groups.google.com/forum/#!topic/elm-discuss/DWrlVjwWzAU>>

U5QJW0DDE : If you have any control over the elm discuss mailing list, I posted my first message there that sums up the issue, with examples, but it is stuck in moderation