

U3SJEDR96 : Yeah, that would work.. You would get a `I ran into a failure decoder: ` thing in the Err case, but eh

U3SJEDR96 : I suppose, if that's unacceptable, you could take that a little further and make a custom response handler - <<https://ellie-app.com/3GPkxJJjHQna1/0>>

U3SJEDR96 : Though you'd still have a String in the error case

U641LDZFU : Evening (or whatever time of day it is where you are) all, I am having problems with union types (again)... is it possible to have a list filled with different types and then run a filter on that list? here is a demo of what I am trying to achieve:

U641LDZFU : <<https://gist.github.com/allansideas/9a2c513d1b4add499b1605abe5d69ed4>>

U3SJEDR96 : Right, so you need to be explicit about the types of entries in a List. Doing that would yield something like this: <<https://ellie-app.com/3GPpVLz2wdRa1/0>>

U3SJEDR96 : Oh, `Record` is actually defined, missed that: <<https://ellie-app.com/3GPpVLz2wdRa1/1>>

U641LDZFU : heh :slightly\_smiling\_face:

U641LDZFU : I believe you taught me that bit last time :smile:

U5FC7BE0G : <@U3SJEDR96> Awesome! That's exactly the solution I was lookign for! String in the error case is fine. Thanks!

U641LDZFU : oh wow, so if I am getting errors on the "big array" like ``The 5th entry has this type: { ..., nodeContent : { ..., chatId : ..., userId : ... } }

But the 6th is:

```
{ ..., nodeContent : { ... } }
```

Hint: Problem in the `nodeContent` field. Looks like a record is missing these fields: chatId and userId``

U641LDZFU : although the nodeContent have different type aliases

U641LDZFU : there is an error with my type aliases?

U641LDZFU : or I have to construct them in the list?

U2LAL86AY : <@U641LDZFU> in elm lists, arrays, dicts and trees and other data that resembles collections of elements - need to have the same type.

you need `chatId` and `userId` on the 6-th element - which i guess is of different type.

Can you please give your type aliases you use in that list?

```
U641LDZFU : Thanks, I think my problem is I need to use another union type... ``type alias ChatMessage = { id : Int
  , chatId : Int
  , userId : Int
  , content : List (Html Msg)
}
```

```
type alias Transition =
  { transitionType : String, toStoryNode : Int, text : Maybe String }
```

```
type alias ChatNodeContent =
  { id : Int, nodeType : String, nodeContent : ChatMessage, state : Maybe String, transitions : List Transition }
```

```
type alias NewsItem =
  { id : Int
  , content : List (Html Msg)
  , userId : 1
  , chatId : 2
  }
```

```
type alias NewsItemNodeContent =
  { id : Int, nodeType : String, nodeContent : NewsItem, state : Maybe String, transitions : List Transition }
```

```
type StoryNode
  = ChatNode ChatNodeContent
  | NewsItemNode NewsItemNodeContent``
```

U641LDZFU : I think I should probably rename, ChatNodeContent, and NewsItemContent, then create a new union type for the nodeContent which can be one of NewsItem or ChatMessage

U2LAL86AY : hmm.. processing .. :smile:

U2LAL86AY : if you have an image will help.

```
U2LAL86AY : ``type alias NewsItem = { id : Int , content : List (Html Msg) , userId : 1 , chatId : 2 }
``
```

This should not compile

U2LAL86AY : you have values mixed with types.

U2LAL86AY : also is not so good to have `content : List (Html Msg)` is better to just keep the data on your model , not html + data.

U641LDZFU : Ah, that was causing me trouble :slightly\_smiling\_face:

U2LAL86AY : i will do a rewrite here.

U641LDZFU : Ah sorry, that was an progress update to: `` type alias ChatMessage =

```
{ id : Int
  , chatId : Int
  , userId : Int
  , content : List (Html Msg)
}
```

```
type alias Transition =
  { transitionType : String, toStoryNode : Int, text : Maybe String }
```

```
type alias ChatNodeItem =
  { id : Int, nodeType : String, nodeContent : StoryNodeContent, state : Maybe String, transitions : List Transition }
```

```
type alias NewsItem =
  { id : Int
    , content : List (Html Msg)
  }
```

```
type alias NewsNodeItem =
  { id : Int, nodeType : String, nodeContent : StoryNodeContent, state : Maybe String, transitions : List Transition }
```

```
type StoryNode
  = ChatNode ChatNodeItem
  | NewsNode NewsNodeItem
```

```
type StoryNodeContent
  = NewsItemContent NewsItem
  | ChatMessageContent ChatMessage
```

```
type alias Player =
  { visitedStoryNodes : List StoryNode
    , currentStoryNode : Maybe StoryNode
  }
```

```
type alias Model =  
  { player : Player  
  }  
...
```