U5LFUHH19 : I'm trying to modify the "elm-spa-template" to create a SPA
(<https://github.com/hurwitzlab/elm-imicrobe-spa>). I basically decided to jump into the deep end and see if I could
swim. I'm merging in code from <https://github.com/rtfeldman/elm-spa-example> to fetch my data, and I'm getting a
compile error when I try to expand my Page.Investigator
(<https://github.com/hurwitzlab/elm-imicrobe-spa/blob/master/src/Page/Investigator.elm>) to include the (currently
commented-out) "investigators"/"loadInvestigators." I have it down to this one change, so I'm hoping maybe someone
can look at this and see my problem because I'm totes stuck.
U0CLDU8UB : boons: `elm-lang/navigation` and `evancz/url-parser`
U1CE9DL9H : <@U5LFUHH19> what is the error?
U5LFUHH19 : <https://gist.github.com/kyclark/f4fbac36c207880ef3871ad0a456916b>
U5LFUHH19 : Errors are coming from Main.elm, but I can't find how it's connected to what I'm doing in
Page.Investigator.
U1CE9DL9H : is this intented `| InvestigatorLoaded (Result PageLoadError About.Model)`?
U1CE9DL9H : because you treat this record later on as if it is a `Investigator.Model`
U2GPX0EKC : <@U40QW928G> ? You mean like Navigation?
U1CE9DL9H : at line 132
U40QW928G : yes navigation for a spa
U285A8S8H : I'm trying to generate a random exercise```
type alias Exercise =
    { note : Note
    , scale : Scale
    , kind : ExerciseKind
    }
```

I have defined lists of all Notes, Scales and ExerciseKinds - now I need to pick a random item from each list. Any tips
where to start?

U2GPX0EKC : <@U40QW928G> Well i use that that elm-navigation
U40QW928G : nice thanks, I just saw those two in the elm tutorial
U0LPMPL2U : <@U285A8S8H> have you used random generators yet?
U40QW928G : I'll check it out
U285A8S8H : <@U0LPMPL2U> nah
U5LFUHH19 : Gah!  That's it, <@U1CE9DL9H> !
U3SJEDR96 : <@U285A8S8H> I think random.pcg and random.extra have nice options for picking a random item from
a list
U0LPMPL2U : They work a bit like JSON decoders. You build simple generators and combine them into a more
complex one
U285A8S8H : that's cool
U5LFUHH19 : Mind you, I'm still pretty lost, but I just could not see that bug.  Thanks!  I'll go back to figuring this out,
now.
U285A8S8H : so is it going to look like`generate notes |&gt; andThen (generate scales) |&gt; ...`?

U0LPMPL2U : more like `Random.map3 Exercise randomNote randomScale randomKind`
U285A8S8H : oh right
U0LPMPL2U : you only need `andThen` if the rolls are dependent on each other
U285A8S8H : thanks, I'll play with that :slightly_smiling_face:
U0CLDU8UB : If you've worked with Tasks before, that's also a helpful frame of reference.
U0LPMPL2U : In your case you probably want something like:```
randomNote : Generator Note
randomNote =
  Random.Extra.sample [Note1, Note2, Note3]
    |&gt; Random.map (Maybe.withDefault Note1)

randomScale : Generator Scale
randomScale =
  Random.Extra.sample [Scale1, Scale2, Scale3]
    |&gt; Random.map (Maybe.withDefault Scale1)

randomScale : Generator Kind
randomScale =
```

```
  Random.Extra.sample [Kind1, Kind2, Kind3]
    |&gt; Random.map (Maybe.withDefault Kind1)

randomExercise : Generator Exercise
randomExercise =
  Random.map3 Exercise randomNote randomScale randomKind
```

U0LPMPL2U : You need that `Maybe.withDefault` because picking a random element from a list returns a `Maybe` since the list might be empty
U285A8S8H : well I _can_ get these to work but I'm not 100% clear how to use them yet :sweat_smile:
U285A8S8H : <@U0LPMPL2U> thanks! I didn't actually need a ready-to-go example :smile:
U0LPMPL2U : I hope I didn't spoil the fun of figuring it out for you :disappointed:
U285A8S8H : don't worry!
U285A8S8H : btw I was _this_ close to getting Elm at work but the CTO decided to use vue + vuex instead. Why? because that's what they're using at his other job
U0LPMPL2U : If you're interested in digging more into Random, I gave a talk about it at ElmConf last year: <https://www.youtube.com/watch?v=YxGWQdFo2Yc>
U285A8S8H : oh, I remember watching some of that! I enjoyed it, though it was difficult to grasp two new concepts (roman names and random in elm) at the same time. Nevertheless it was helpful
U0CLDU8UB : That was one of my favorite talks last year! :slightly_smiling_face: