

Hello Elm!

"a delightful language for reliable webapps"

- >> a language
- >> compiles to JS
- >> has its own package ecosystem
- >> focused on building browser apps

```
// JavaScript
```

```
function incrementAll(numbers) {  
    return numbers.map(num => num + 1);  
}
```

```
-- Elm
```

```
incrementAll numbers =
```

```
    List.map (\num -> num + 1) numbers
```

```
-- Elm
```

```
incrementAll : List number -> List number
```

```
incrementAll numbers =
```

```
    List.map (\num -> num + 1) numbers
```

- >> functional
- >> statically typed
- >> in the ML family (Haskell, OCaml, Purescript)

Why Elm?

✖ ► Uncaught TypeError: undefined is not a function
at <anonymous>:1:1

✖ ► Uncaught TypeError: Cannot read property 'foo' of undefined
at <anonymous>:1:10

(Almost) no runtime exceptions!

Detected errors in 1 module.

-- TYPE MISMATCH ----- Main.elm

`user` is being used in an unexpected way.

```
35|      { user | email = "alice@example.com" }  
      ^^^^
```

Based on its definition, `user` has this type:

```
{ email : ..., name : ... }
```

But you are trying to use it as:

```
{ b | email : ... }
```

Hint: The record fields do not match up. Maybe you made one of these typos?

```
email <-> email
```

Astonishingly helpful error
messages



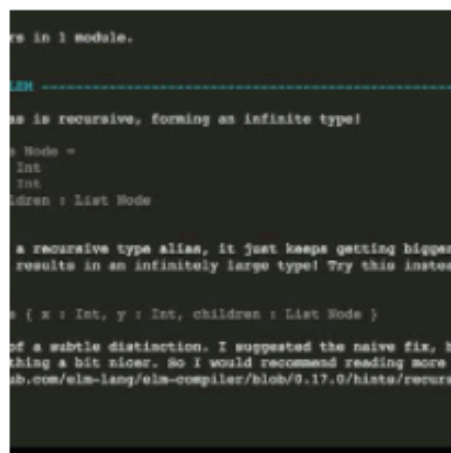
John Carmack ✓

@ID_AA_Carmack

Following



That should be an inspiration for every error message.



Gregory Schier @GregorySchier

Thanks @elmlang for the most useful error message I've ever seen

RETWEETS

418

LIKES

502



3:55 PM - 24 May 2016



12



418



502

84 Open 108 Closed	Author	Labels	Milestones	Assignee	Sort
Fix strange `t_s_o_l` error message #201 opened 8 hours ago by salutis					
undefined variables gives issue about single quotes #200 opened 6 days ago by Alok					
Redundancy error in case..of could be clearer #199 opened 10 days ago by ckoster22					
Possibly improve hints for type mismatches due to incorrect function/variable used #198 opened 21 days ago by ScrimpyCat					
Mention the arrow in type mismatch errors #197 opened 27 days ago by marick					2
SSCCE for line number of declaration in missing whitespace scenario #196 opened 27 days ago by brunogirin					

Fearless refactoring

Type-enforced semantic versioning

Easy to embed inside your existing
JS app

```
npm i react-elm-components
```

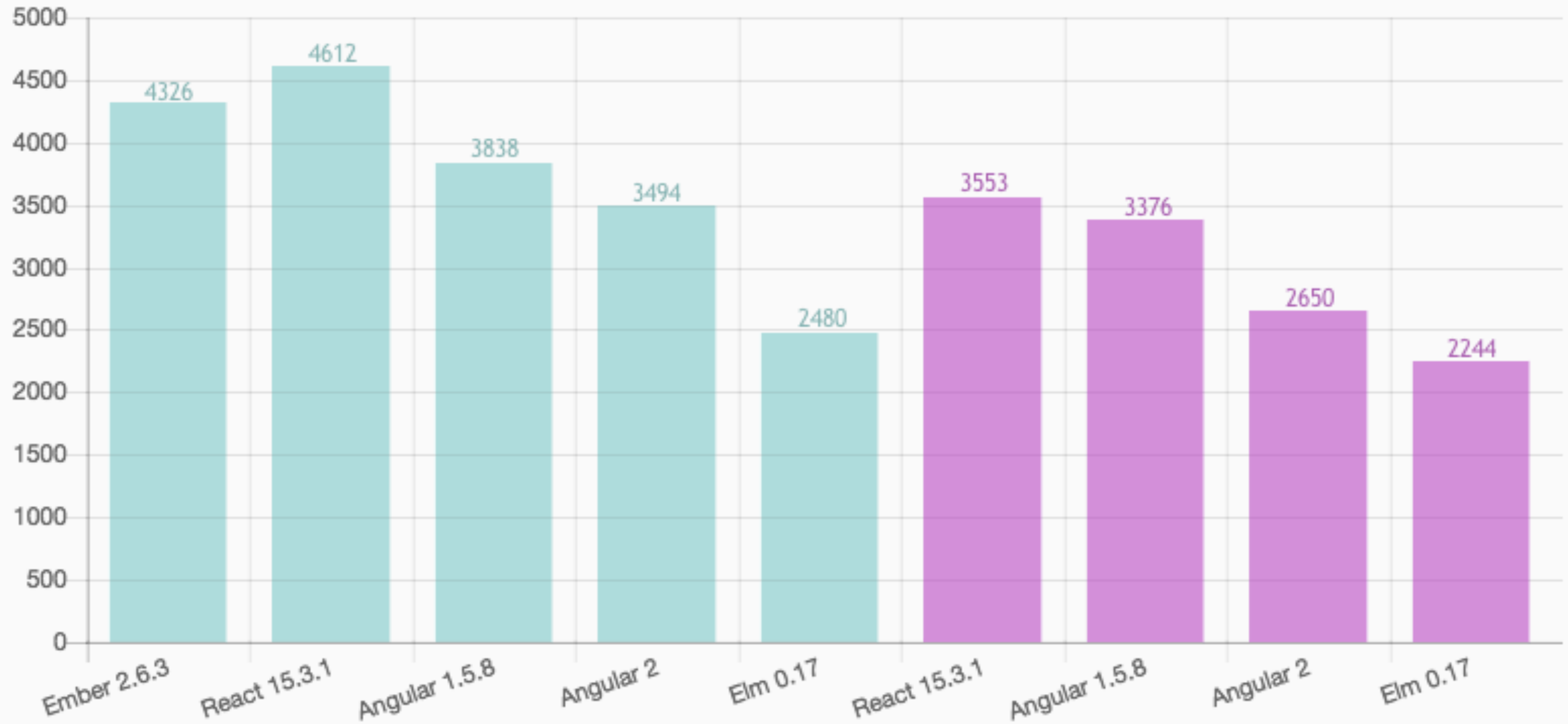
Really fast HTML

Speed in Milliseconds

Shorter bars are Better

Chrome 52 on OSX

■ = Naive
■ = Optimized



One really nice way of building
apps



It's fun!

Thanks!

`*/jamesmacaulay`

www.meetup.com/Elm-Toronto

Thursday, February 9th @ Dundas Video

>> elm-lang.org

>> guide.elm-lang.org

>> www.manning.com/books/elm-in-action

>> pragmaticstudio.com/elm