

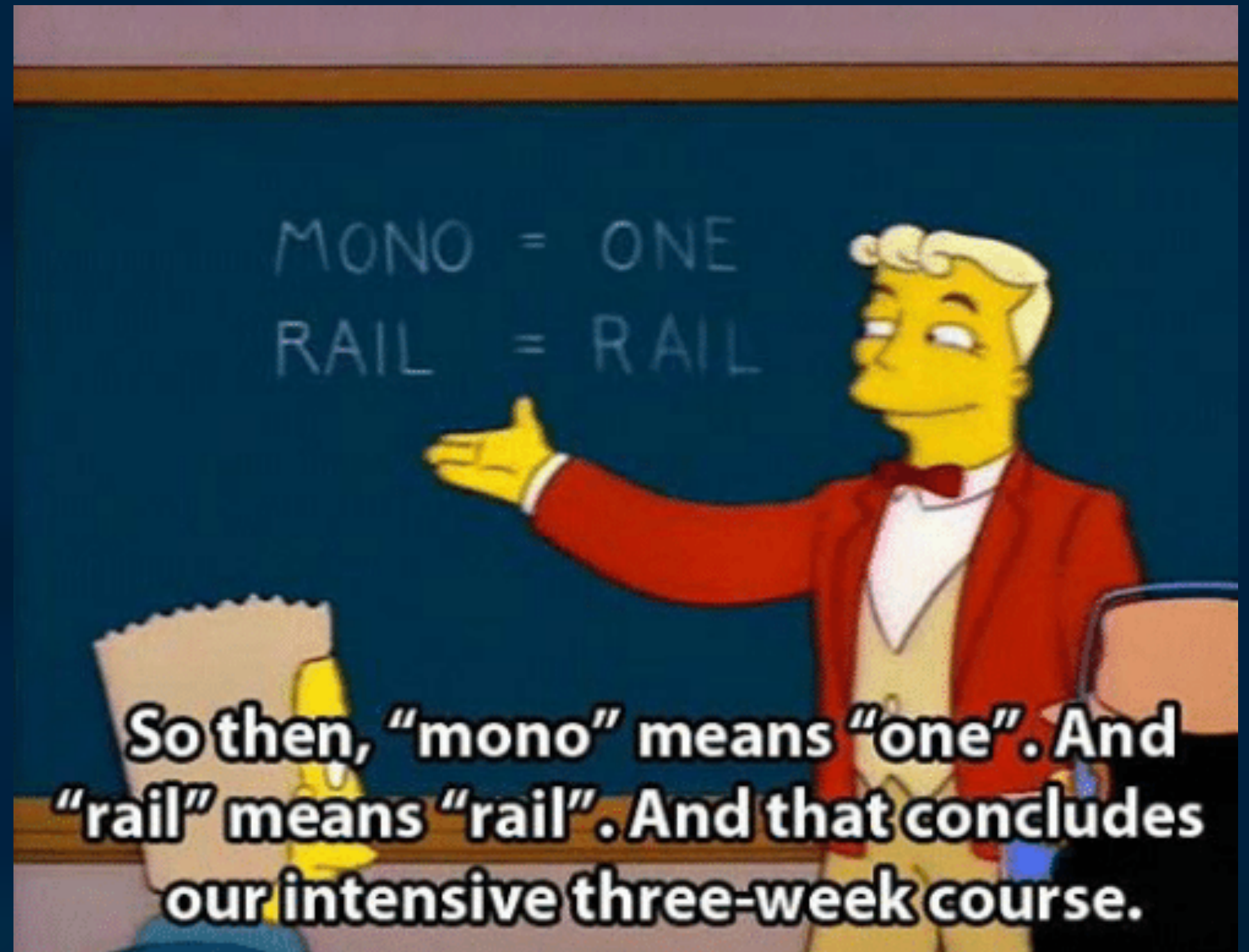
# JS and TS Monorepos



Oct 15, 2020  
**Mike North**


# What is a monorepo?

- ▶ "One repo"
- ▶ "many related JS/TS packages, co-located in a git repo"





localhost



**Microsoft**

● Chris User


Channels

# throw back thursday


Logout

### #throw back thursday


Remember the good old days? yay, us too.




**Clippy** Apr 30, 2019 20:04:28 PM  
Sigh, I miss having a job...




**Clippy** Apr 30, 2019 20:04:64 PM  
It was so nice to "talk" and help people around the world with their spelling mistakes!




**Clippy** Apr 30, 2019 20:04:70 PM  
Don't you miss it?



**office97** Apr 30, 2019 20:04:12 PM  
Tell me about it, they were so happy when they found the pinball game in Word 97



**Clippy** Apr 30, 2019 20:04:14 PM  
OHH and that flight simulator game in Excel! People always tried to shoot me for some reason



**office97** Apr 30, 2019 20:04:86 PM  
At least people remembers you and try to bring you back. I don't think anyone

+

SEND

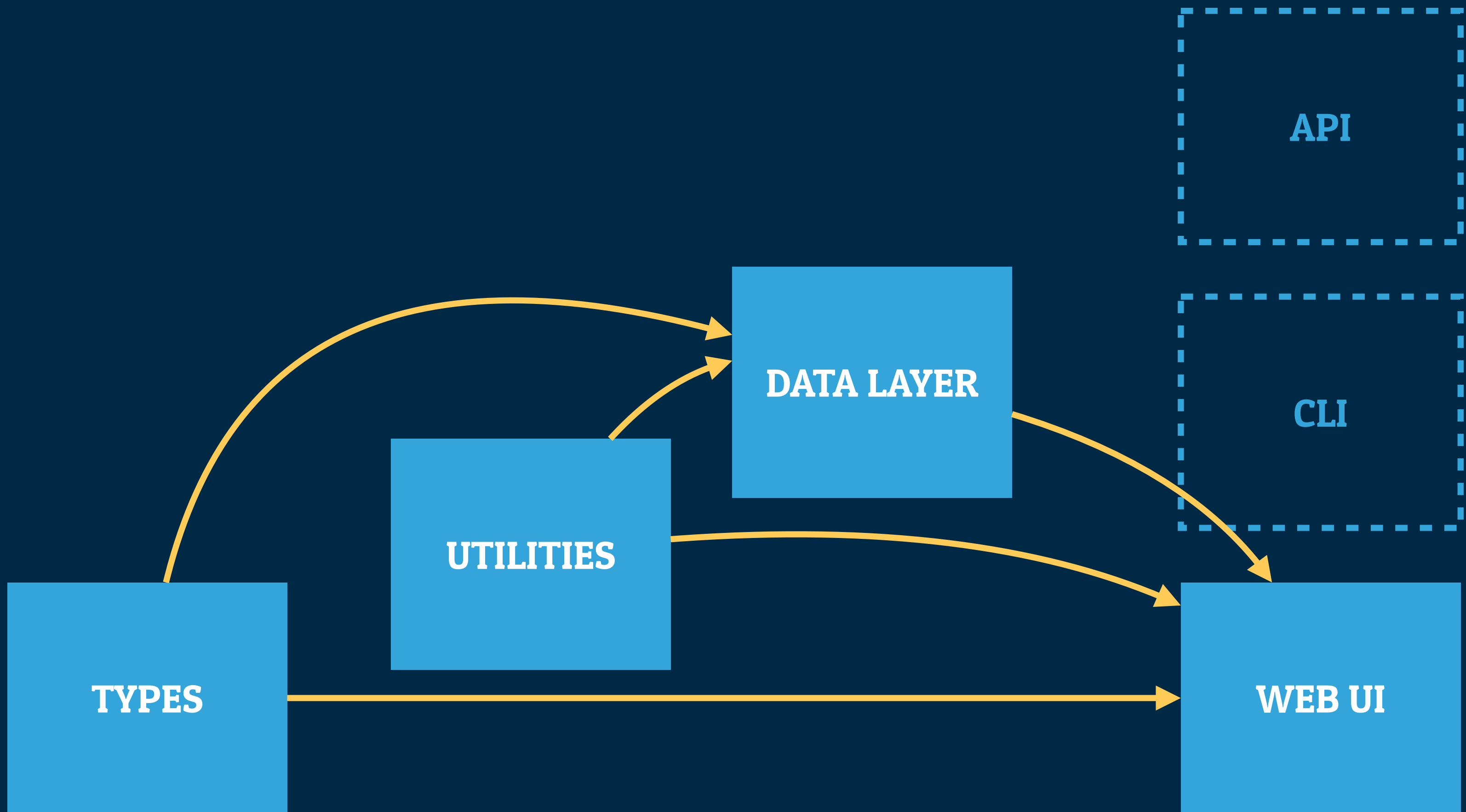
**WEB UI**

**DATA  
LAYER**

**UTILITIES**

**TYPES**

**Low Level** → **High Level**



# Why should I care?

- ▶ **Encapsulation tools** that JS ecosystem is missing
- ▶ One commit can modify **many** packages, **single history of a collection**
- ▶ Test a family of packages **together** and **before a release**
- ▶ Dramatically **reduced maintenance overhead** compared to N libraries




# Spoiler: not magic

- ▶ More challenging to manage than a single "monolith" repo
- ▶ Several new tools we'll need to learn
- ▶ New risks you'll need to mitigate
- ▶ ...but sometimes it's worth it



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SEND



[View on GitHub](#) 

# js-ts-monorepos

Mike's JS/TS Monorepos Course

[Home](#)

## API Reference

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## Packages

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| Package                       | Description |
|-------------------------------|-------------|
| <a href="#">@shlack/data</a>  |             |
| <a href="#">@shlack/types</a> |             |
| <a href="#">@shlack/ui</a>    |             |
| <a href="#">@shlack/utils</a> |             |

# types package

## Why does this library exist?

@shlack/types is a package containing broadly-useful types and type guards for our demo slack app. This is part of Mike's JS & TS Monorepos Course which you can learn more about by visiting [the repo on GitHub](#)

If you want to watch a recorded video of this course, look for it on [FrontEnd Masters](#)



## Remarks

All interfaces are prefixed with `I`

## Functions

| Function                       | Description   |
|--------------------------------|---|
| <a href="#">isChannel(arg)</a> | (BETA) Check whether a given value is an <a href="#">IChannel</a> |
| <a href="#">isMessage(arg)</a> | (BETA) Check whether a given value is an <a href="#">IMessage</a> |

# isTeam() function

This API is provided as a preview for developers and may change based on feedback that we receive. Do not use this API in a production environment.

Check whether a given value is an [ITeam](#)

Signature:

```
export declare function isTeam(arg: any): arg is ITeam;
```

## Parameters

| Parameter | Type | Description    |
|-----------|------|----------------|
| arg       | any  | value to check |

Returns:

arg is [ITeam](#)

## Example

Here's an example of how to use this guard



# Agenda

- ▶ Yarn workspaces
- ▶ TypeScript composite projects
- ▶ Build scripts for Monorepos
- ▶ Lerna
- ▶ API Extractor
- ▶ "Package private" and "Project private" interfaces
- ▶ Hassle-free "publish to npm" testing
- ▶ Versioning strategies
- ▶ App and Library Use cases
- ▶ "Wrapper" packages
- ▶ Private "dev utility" packages

<http://bit.ly/mon-o>

WORKSHOP PROJECT AND NOTES

**(SETUP INSTRUCTIONS ARE IN THE README)**