

Write powerful Javascript  
modules to make your apps

**DRY**

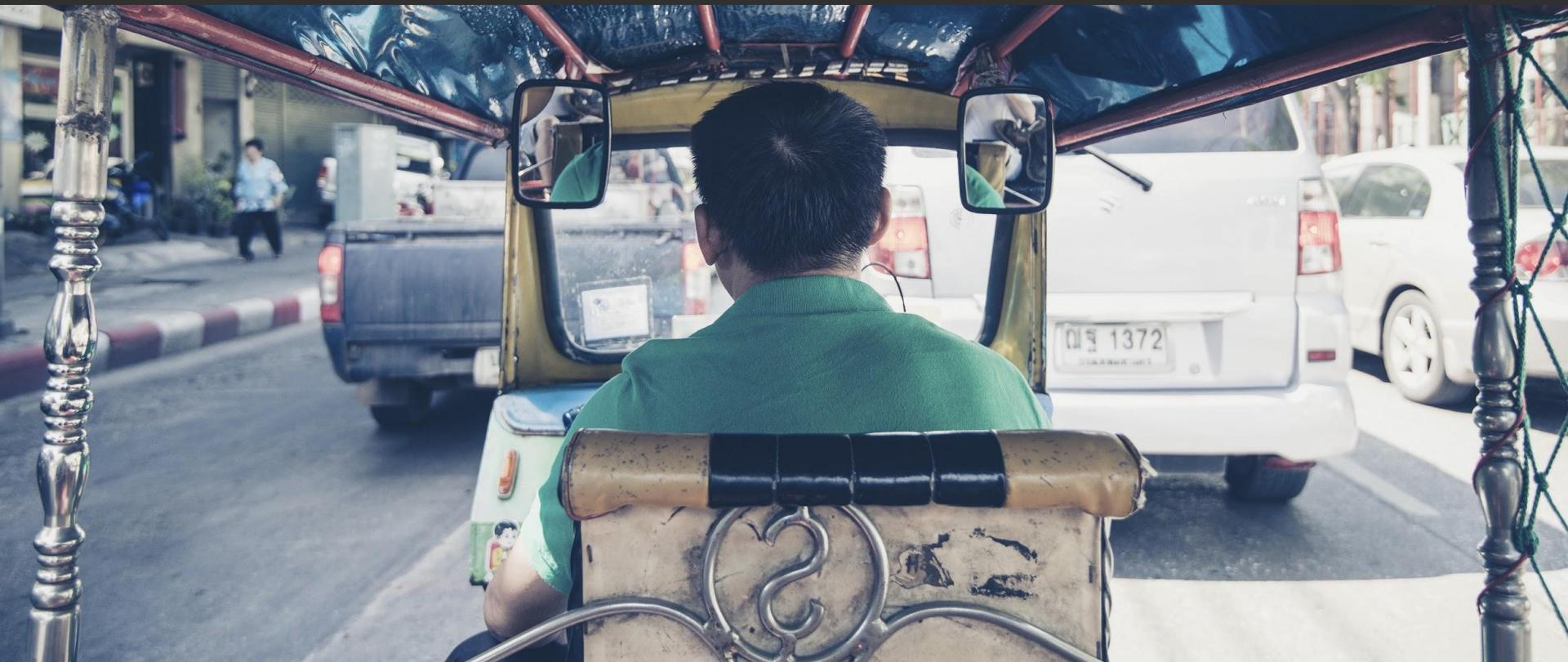
DevNation 2016

# Brian Leathem

@bleathem

**RED HAT®**  
MOBILE APPLICATION  
PLATFORM

# Field Workforce Management

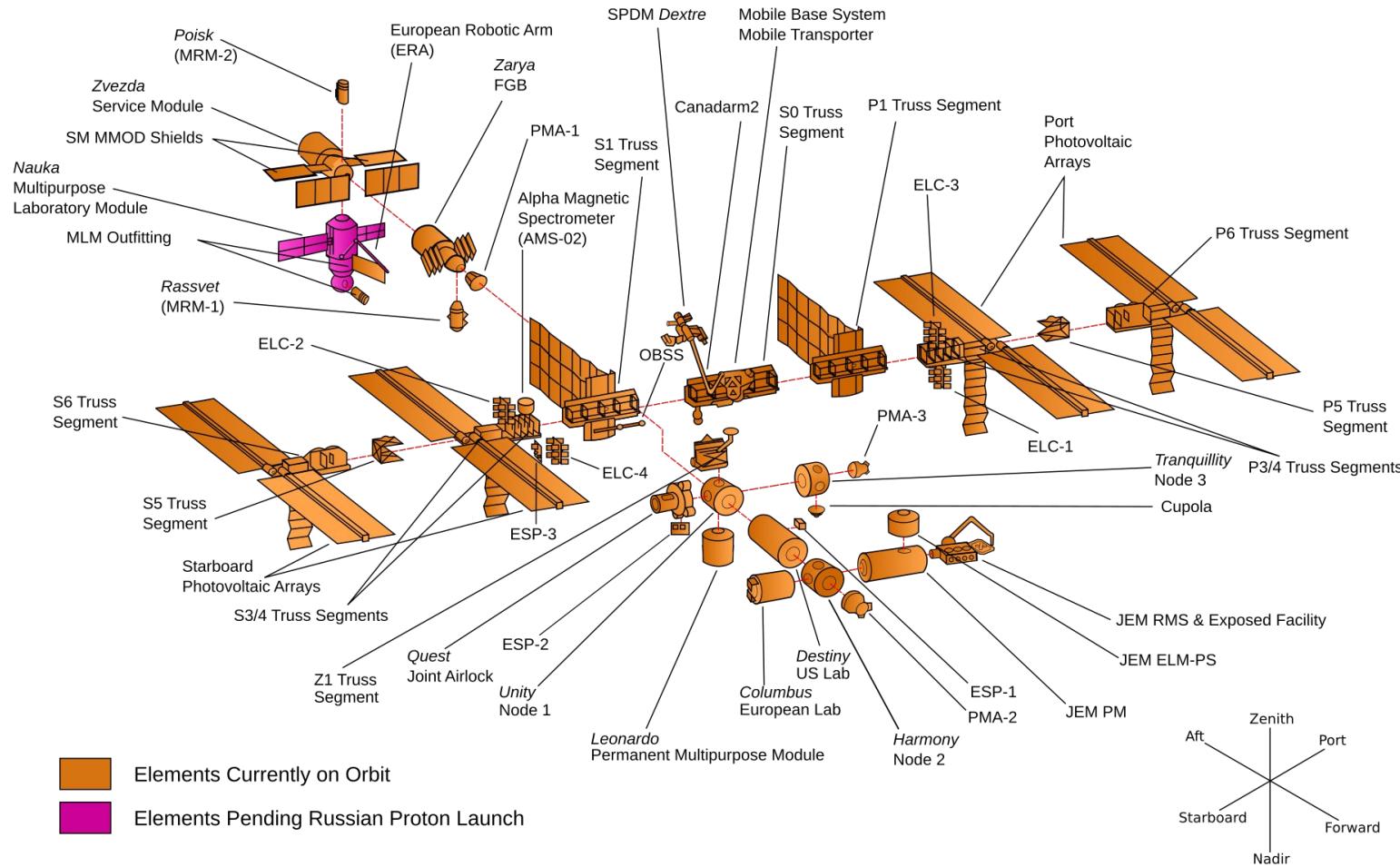


# Modularity

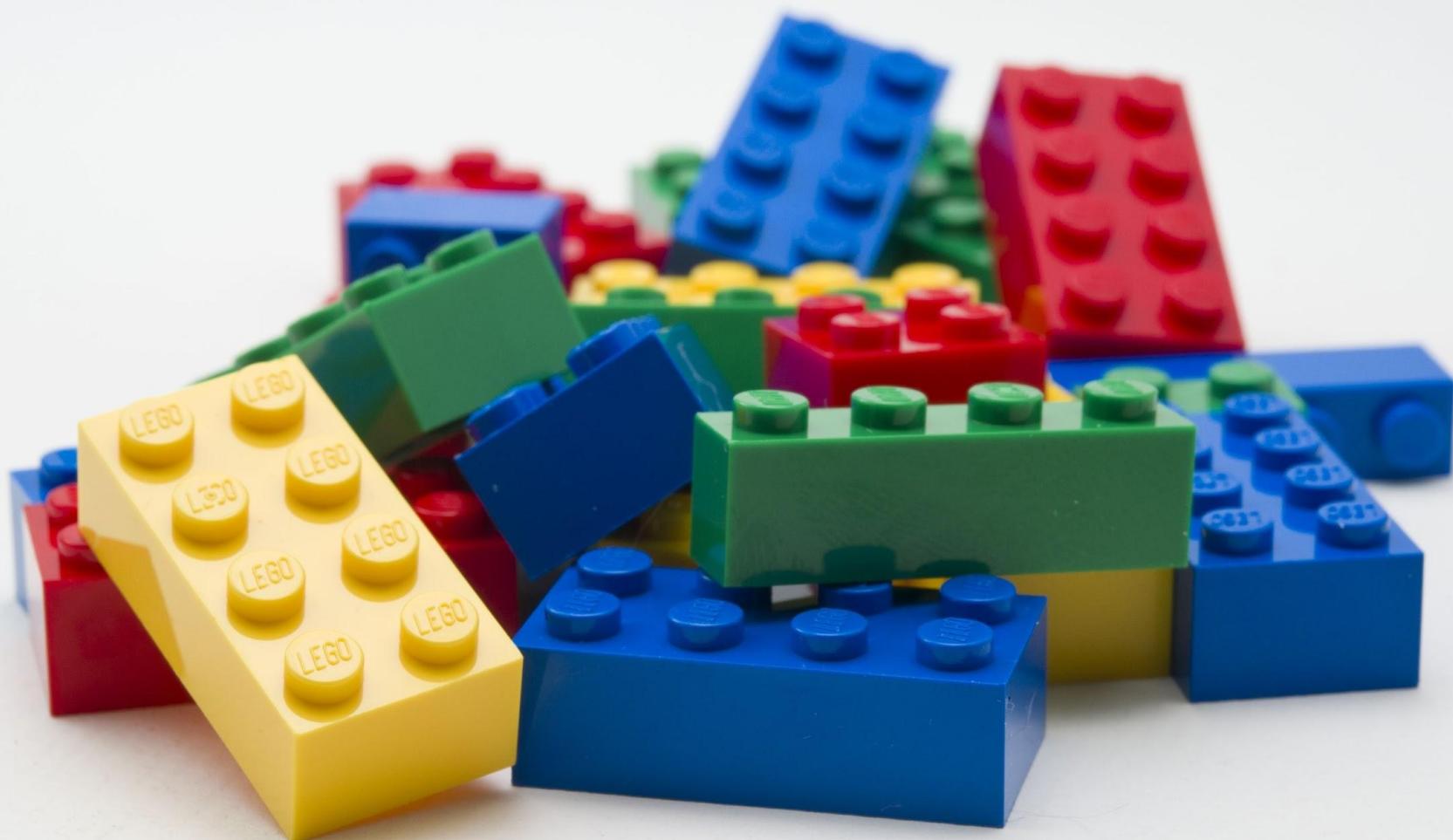


# ISS Configuration

As of May 2011 (ULF6 - STS-134)

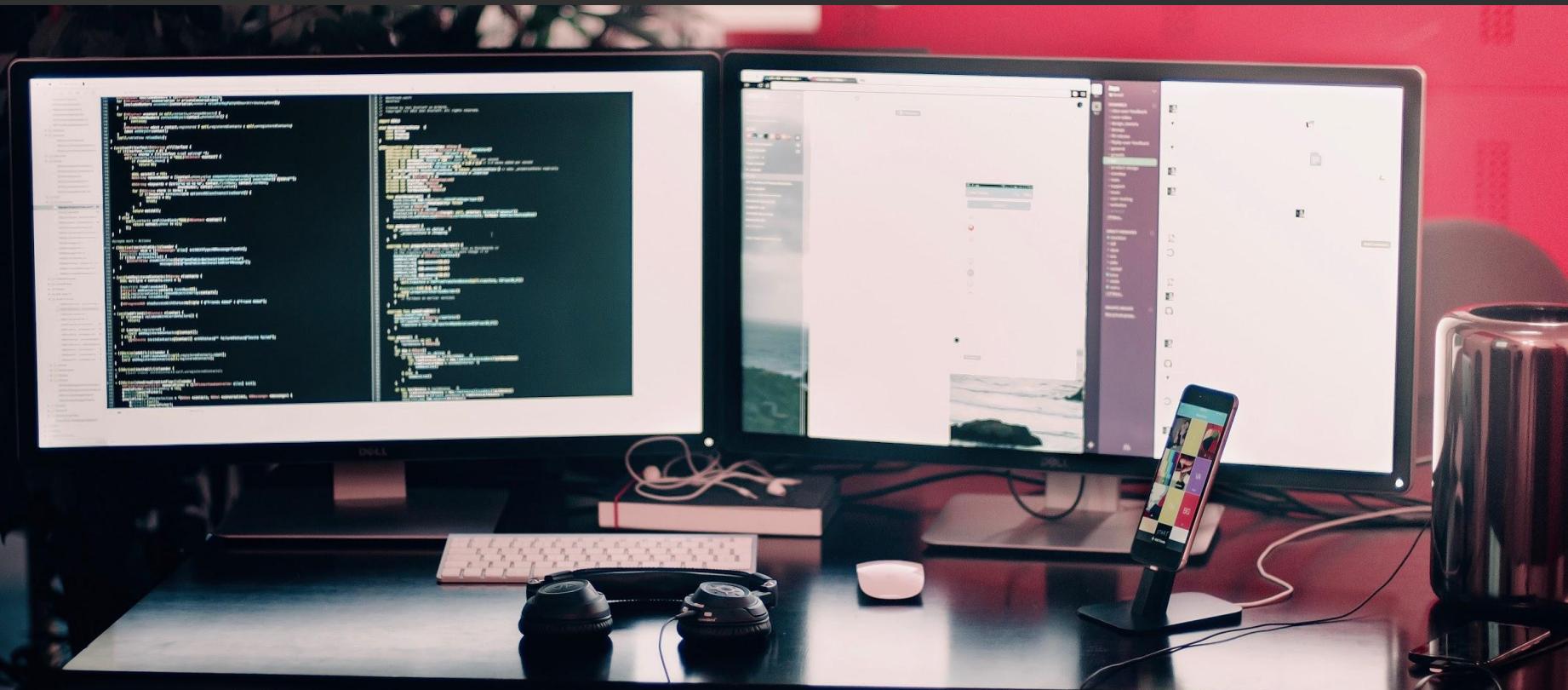








# Modularity in Software Engineering

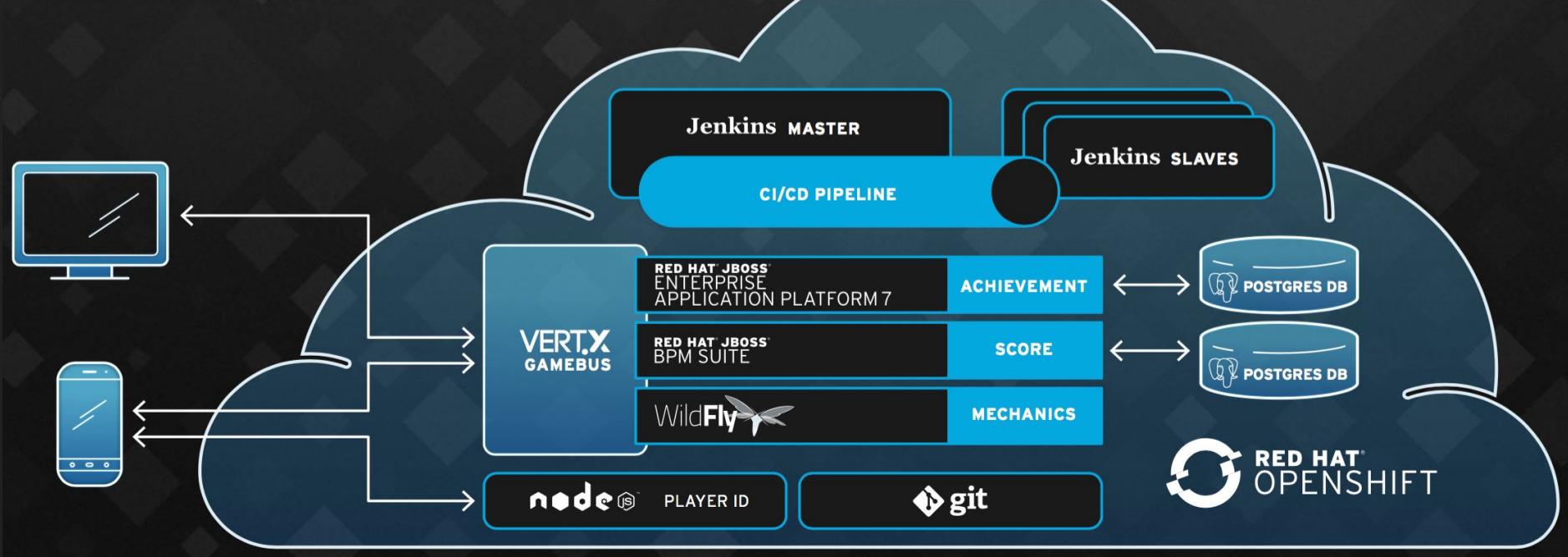








At large scale



# Keynote Microservices

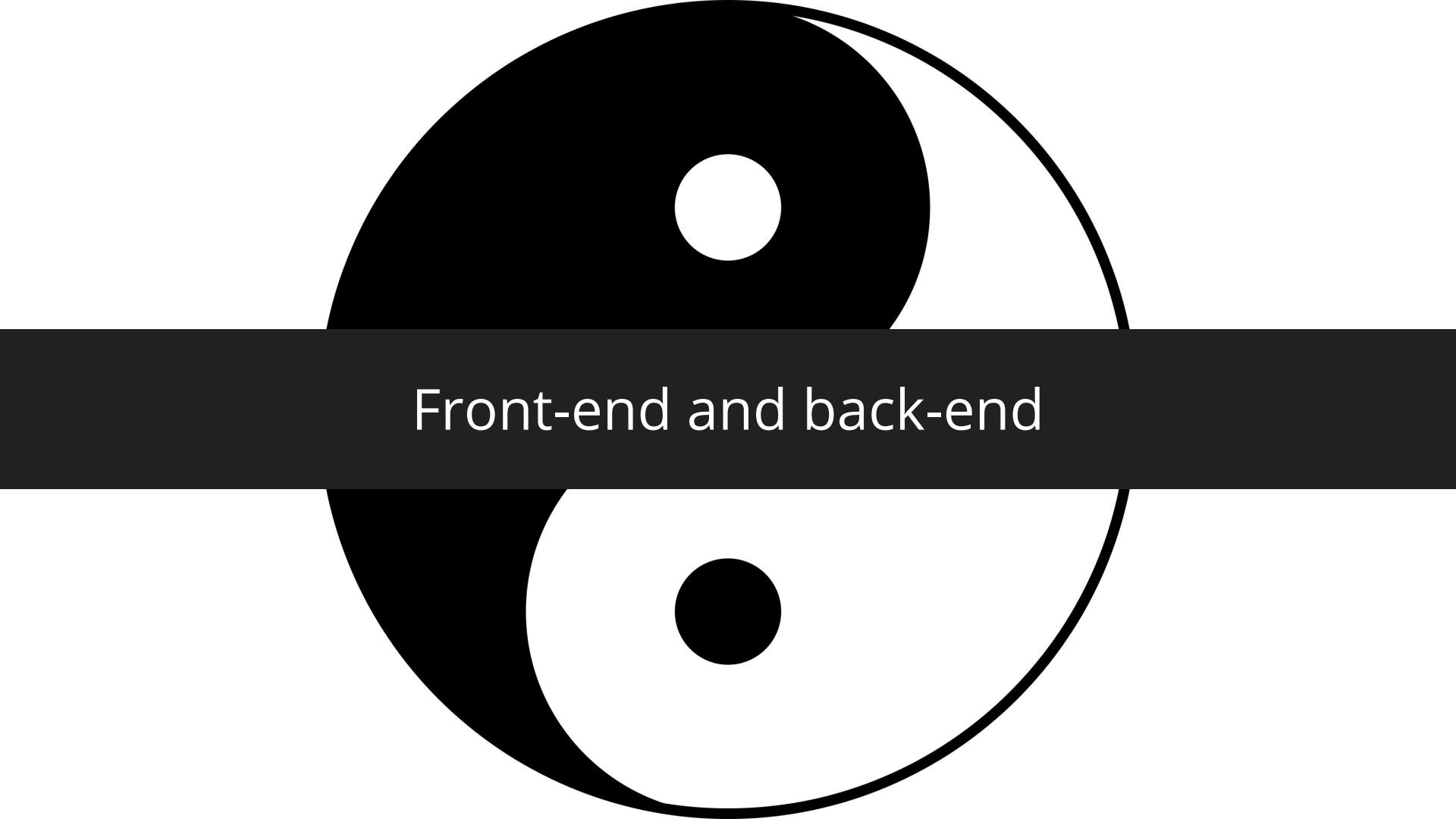
# At small scales: Keeping your code DRY



Don't  
Repeat  
Yourself

# Why DRY?

Bring it back to  
**javascript**



Front-end and back-end

# Javascript Libraries

L O UNDERSCORE.JS

The logo features the letters 'L' and 'O' in large, bold, black sans-serif font. Below 'L' is a thick black horizontal bar. Below 'O' is a thick blue horizontal bar. To the right of 'O' is the text 'UNDERSCORE.JS' in a smaller, black, sans-serif font. A thick blue horizontal bar is positioned below 'UNDERSCORE' and a thicker dark navy blue horizontal bar is positioned below 'JS'. The entire logo is set against a white background.

# Javascript Build Tools



# Testing



# Frontend / UI



# Javascript Libraries



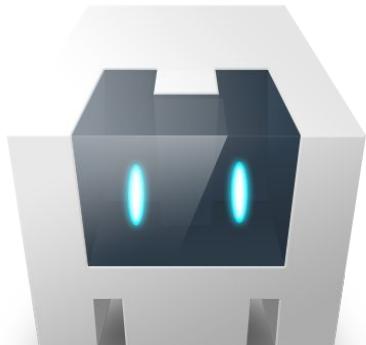
# Other libraries



# More prescriptive frameworks



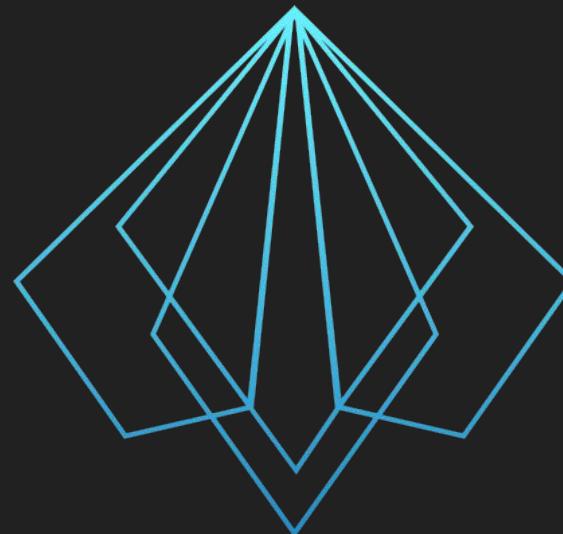
# Cordova plugins



APACHE  
**CORDOVA™**

# CSS libraries

B

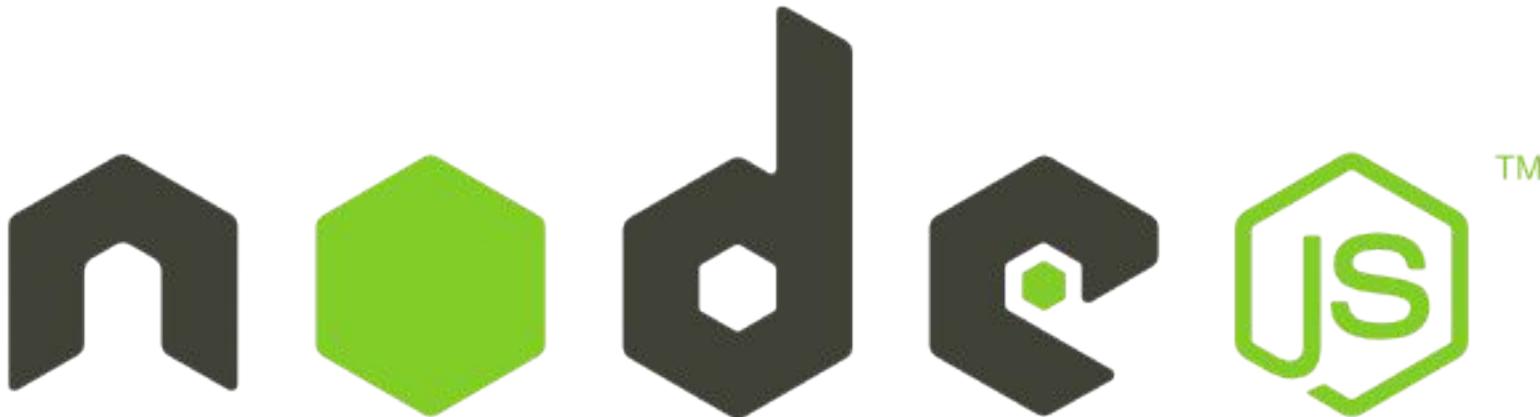


# Block

# Element

# Modifier

# Backend



# Module Packaging & Delivery



# Module Repository

Bower is dead.

Npm is king.

Jspm is looking good.

**WFM**

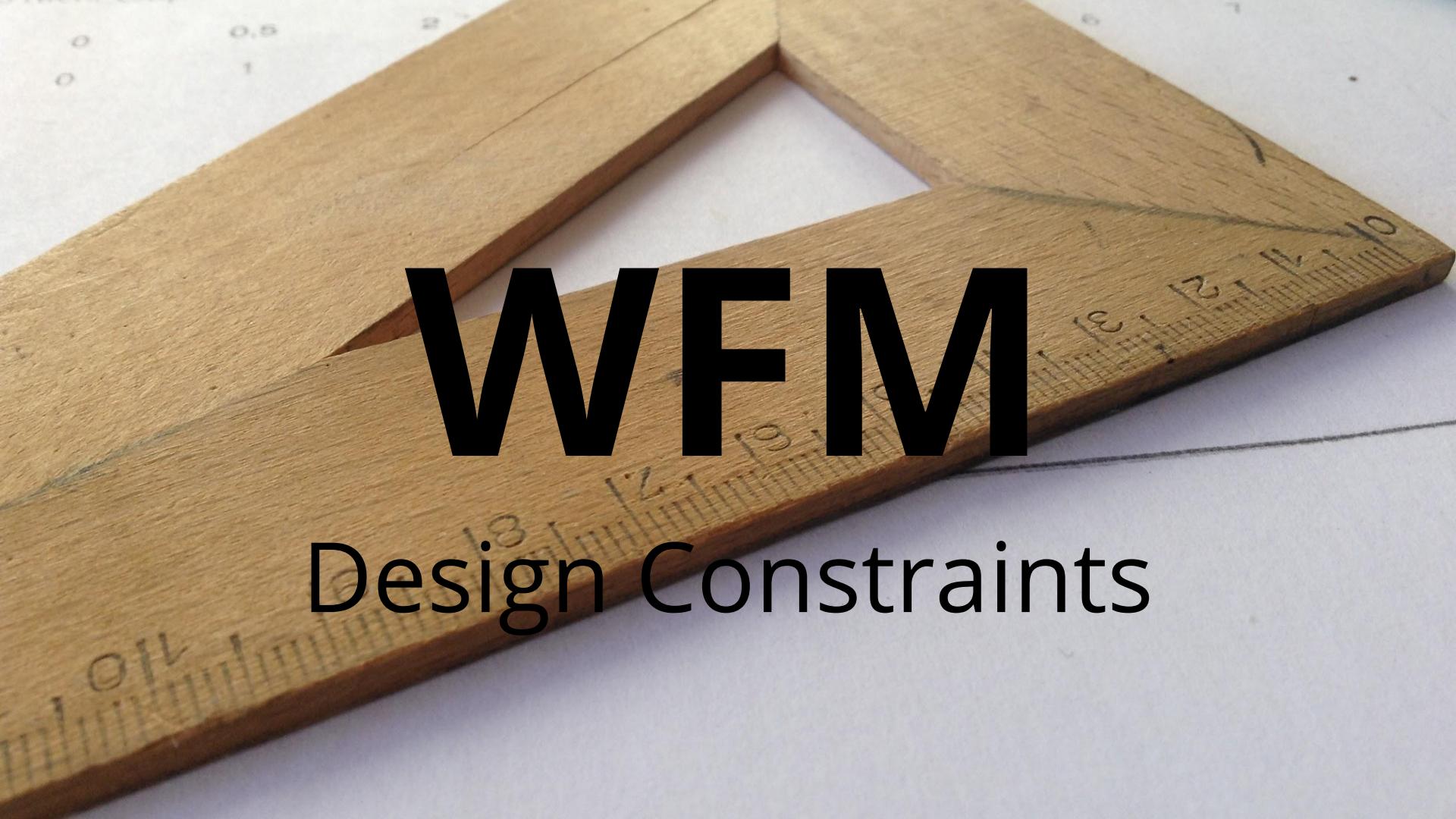
Modularity

# Considerations for a module system

# WFM

## Design Goals





# **WFM**

## Design Constraints



# Express



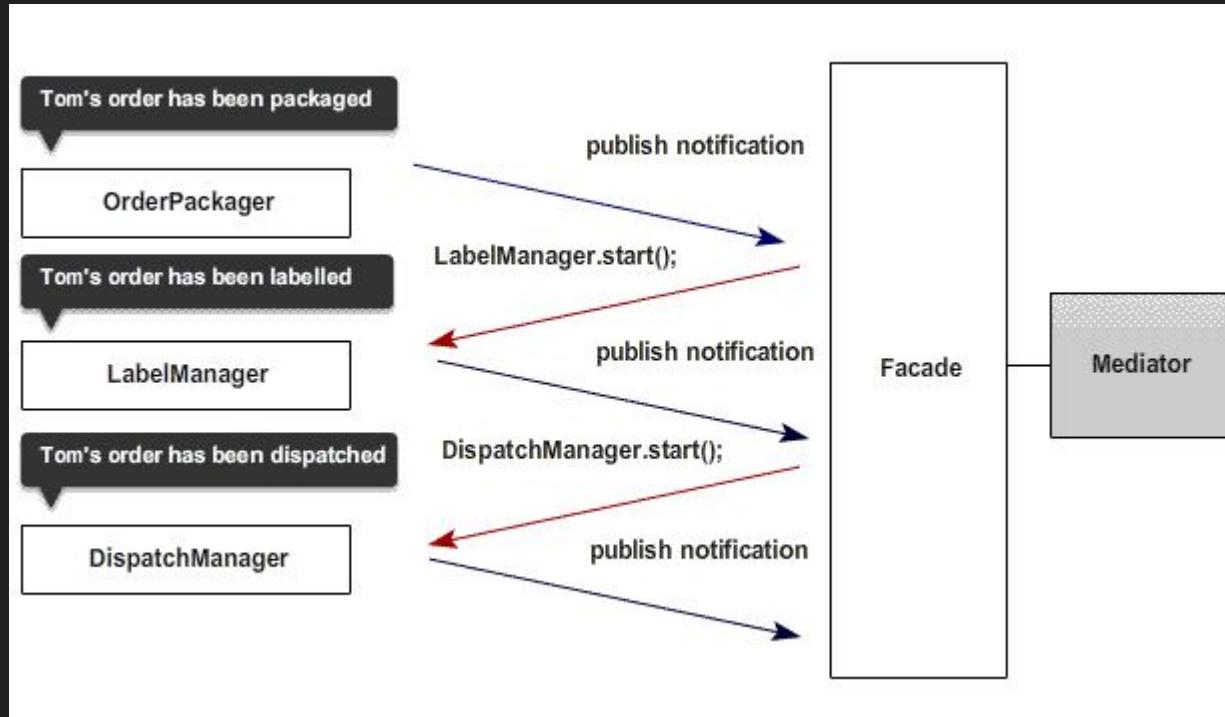
In the module:

```
module.exports = 'wfm.camera';
```

In the application:

```
require('fh-wfm-camera')
```

# Mediator Pattern

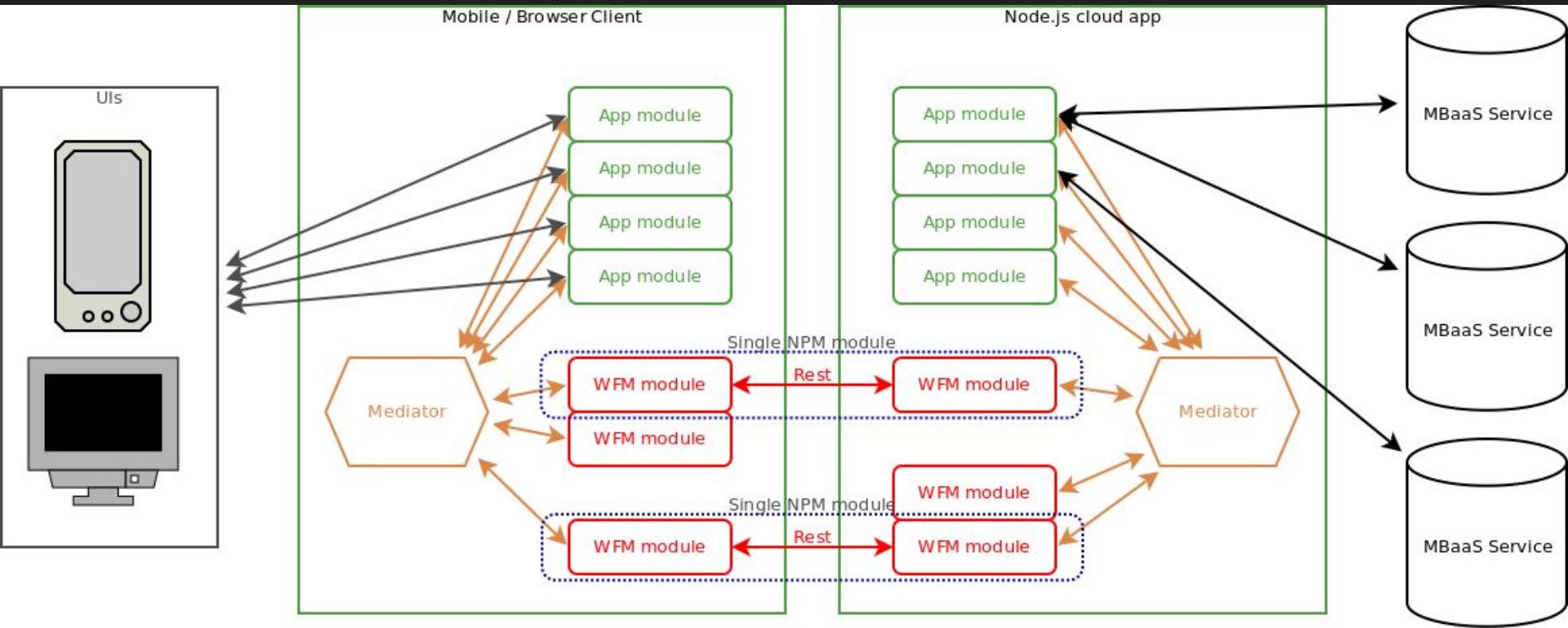


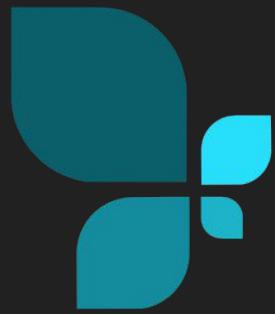
<https://adduosmani.com/largescalejavascript/>

# Mediator Pattern in a cloud app

```
mediator.subscribe('wfm:workorder:create:',  
function(object, ts) {  
    self.create(object, ts)  
        .then(function(object) {  
            Mediator  
                .publish('done:wfm:workorder:create:' + ts,  
                    object);  
        }) ;  
}) ;
```

# WFM Architecture





FEEDHENRY  
**RAINCATCHER**

# RainCatcher Modules

<https://github.com/feedhenry-raincatcher>

# Demo