



Creating an ENTERPRISE FRONTEND Library in 2018

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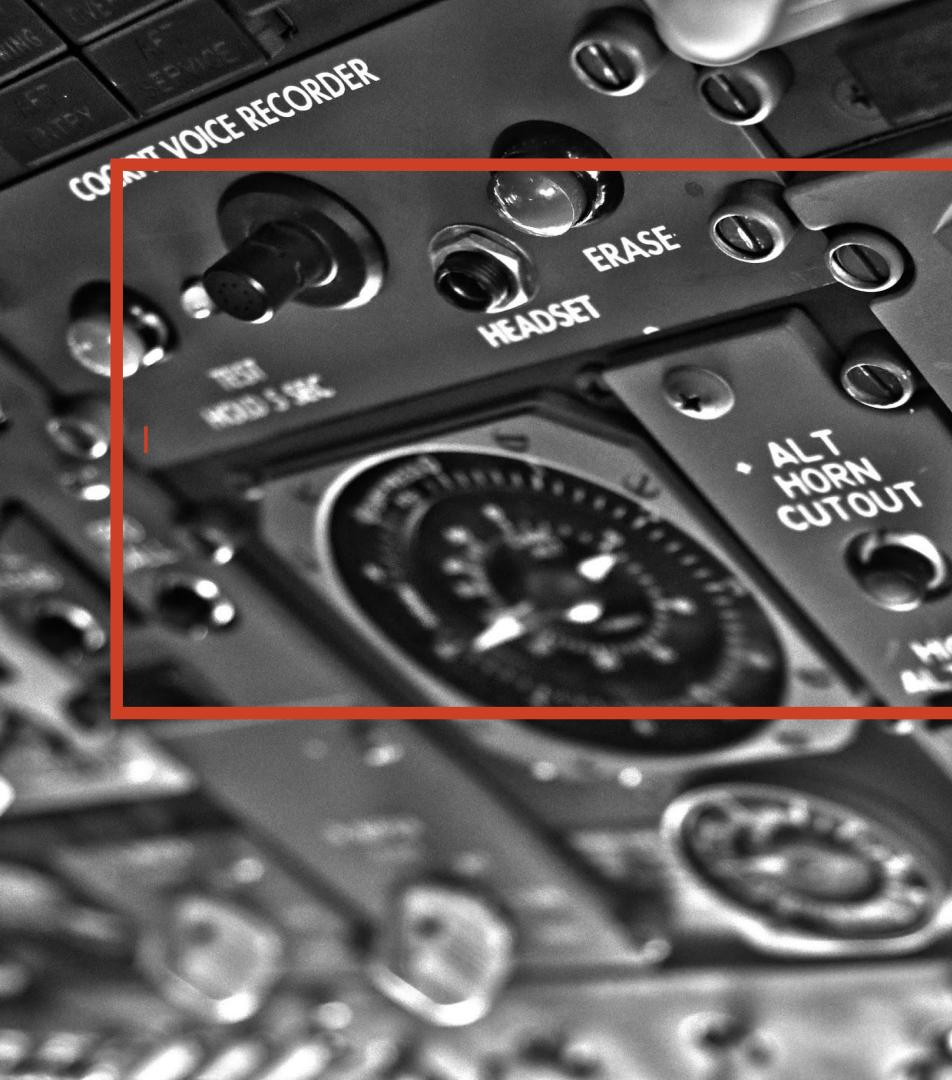












— WHAT IS ENTERPRISE SOFTWARE?



Enterprise software, also known as enterprise application software (EAS), is computer software used to **satisfy the needs of an organization** rather than individual users

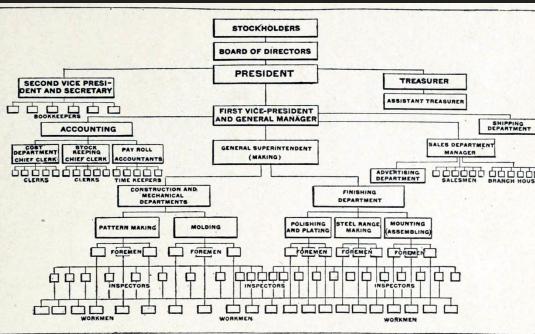
Wikipedia



Basically means that it's
**complicated enough, that you
can build consulting business
around it**

@vartec, StackExchange

ENTERPRISE IS COMPLEX



Complex Relations

Enterprises grow, and **managing complexity**, relations and communication becomes more difficult



Interactions

Interact with similarly complex organizations reaching **durable agreements**



Change Impact

Small changes can cause **ripple effects** affecting the whole structure

— WHY BUILD YOUR OWN?

THE JOURNEY (JavaScript in Liferay)



Lifera

In a Chu



James Wang
@jwangARK



I understand how consumer companies are founded but can't for the life of me understand how there are so many SaaS startups. Who gets up in the morning and says: "I want devote the next chapter of my life to improve enterprise workflows!"

22:51 - 7 may. 2018



65



18 personas están hablando de esto



2008

Components based on jQuery

5.1

6.0

AlloyUI / YUI

This is a sample text.
Insert your desired text here.

2010

YUI is discontinued

Yahoo stops supporting and developing it



2014



What now?

Angular, Ember, React, Backbone,
Polymer, jQuery...

2015

Metal.js

Specific constraints, controlled



2016



Metal.js (JSX)

There's another world out there worth exploring too!

2017

2018

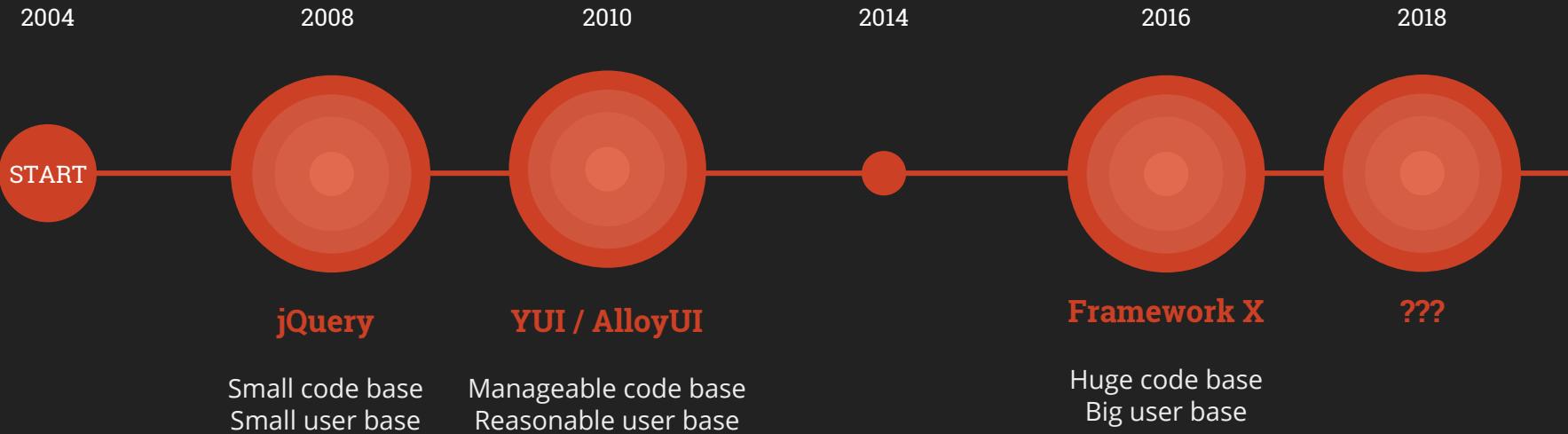
Clay

Modern UI component library

7.1

2018

STABILITY CHANGE IMPACT



ENTERPRISE CONSTRAINTS



Technological Stack

Breaking away from your current stack is **not always possible**. Solution that solves your needs on your stack

Time-to-Live

Products are bound by **long-term** contracts and agreements. Technology **built to last**

Consistency

Big number of teams and people need to find consistent solutions and patterns to **reduce cognitive barriers**

QUICK RESPONSE TIME



It takes months to find a customer and only **SECONDS to lose one**

Unknown Customer Service Guru

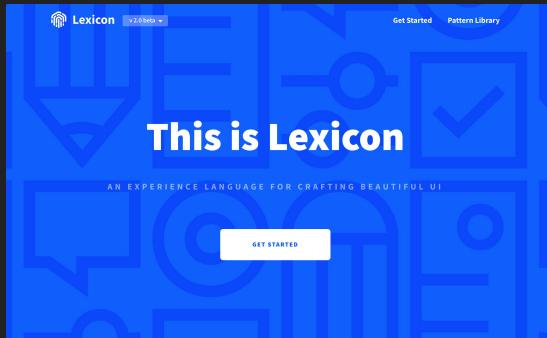


— HOW TO BUILD IT

lessons learned

building  and 

WHAT... HOW TO BUILD WHAT?



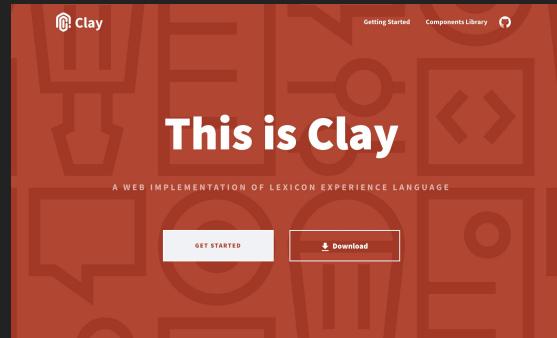
Lexicon

Coherent Experience Language
to identify **interactions** and
common patterns



Metal.js

Commonly used **utilities** and
abstractions with a custom
component rendering layer



Clay

Web implementation of
Lexicon based on Metal.js

SERVE YOUR OWN NEEDS

Identify your **REAL NEEDS**

- Server-Side Rendering
- Internationalization
- Modularity
- Theming
- ...



BEWARE OF PREMATURE ABSTRACTIONS



Premature abstraction is the **root
of all evil**

Adapted Old Saying

HEAVILY INVEST ON IT

LEXICON



CLAY



RESIST THE HYPE



Or... **do not chase** the shiny thing

- Experiment
- Learn the use cases
- Understand the trade-offs
- Re-evaluate

DOCUMENT ALL THE THINGS!

Base Grid

The Base Grid is the main metric reference of our system. It's the same time the starting point when defining the components.

Metal is core templating module (React). Bot is used to p

Portal

KEEP CALM AND MIGRATE

LEARN HOW TO MIGRATE PORTAL TO NEW CLAY CODE MUCH MORE

LEARN ABOUT LEONIC

LEARN ABOUT CLAY

Our Architecture

Adding Todos

You almost have a fully functioning Todo App! The only missing feature is the ability to add new todos to the list. This is where the `TodoForm` component comes into play.

```
1 // TodoForm.js
2
3 class TodoForm extends React.Component {
4   render() {
5     return (
6       <form>
7         <div>
8           <input type="text" value={this.props.value} onChange={this.props.onChange}>
9         </div>
10        <button type="submit">Add</button>
11      </form>
12    )
13  }
14}
```

Danger This is an error message

Success This is a success message

Info This is an info message

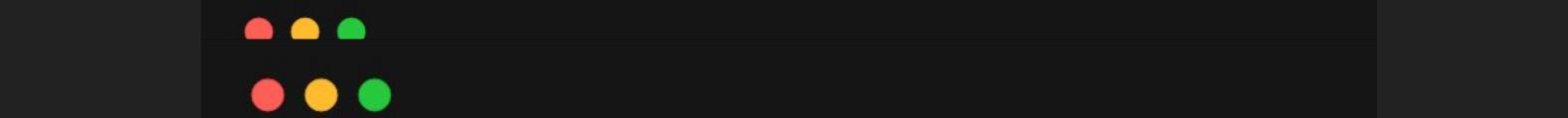


DON'T FORGET THE BASICS / STANDARDS



```
<link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/clay/lib/css/atlas.css">
<script src="https://cdn.jsdelivr.net/npm/clay/lib/js/clay.js">
```

BUILD ON LAYERS



```
<clay-alert
  closeable="true"
  style="success"
  message='This is a success closeable alert'
  spritemap="/vendor/lexicon/icons.svg"
  title="Success">
</clay-alert>
```

—
Thanks!

PASSION LED US HERE

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