# Intro to React and the Elm Architecture

### love the 90's



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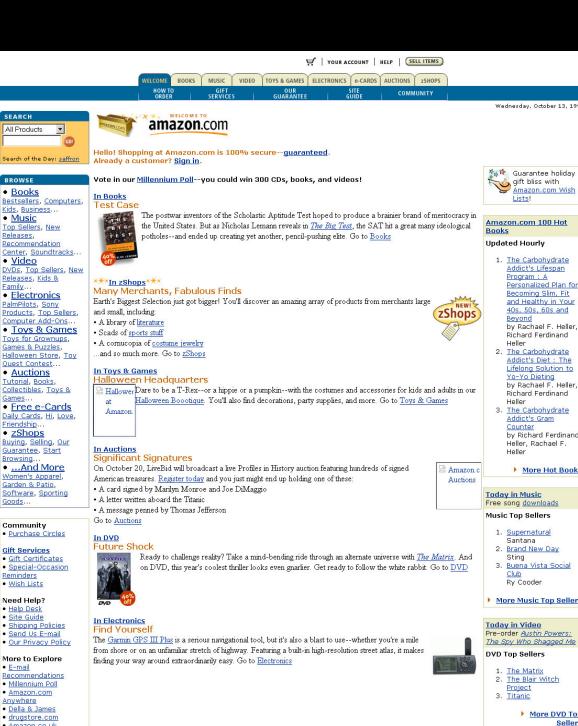


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Wednesday, October 13, 1999

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# GUI = \(\lambda\)(DB, request)

### Math, baby

$$F^{\circ} = C^{\circ} \cdot 9/5 + 32$$

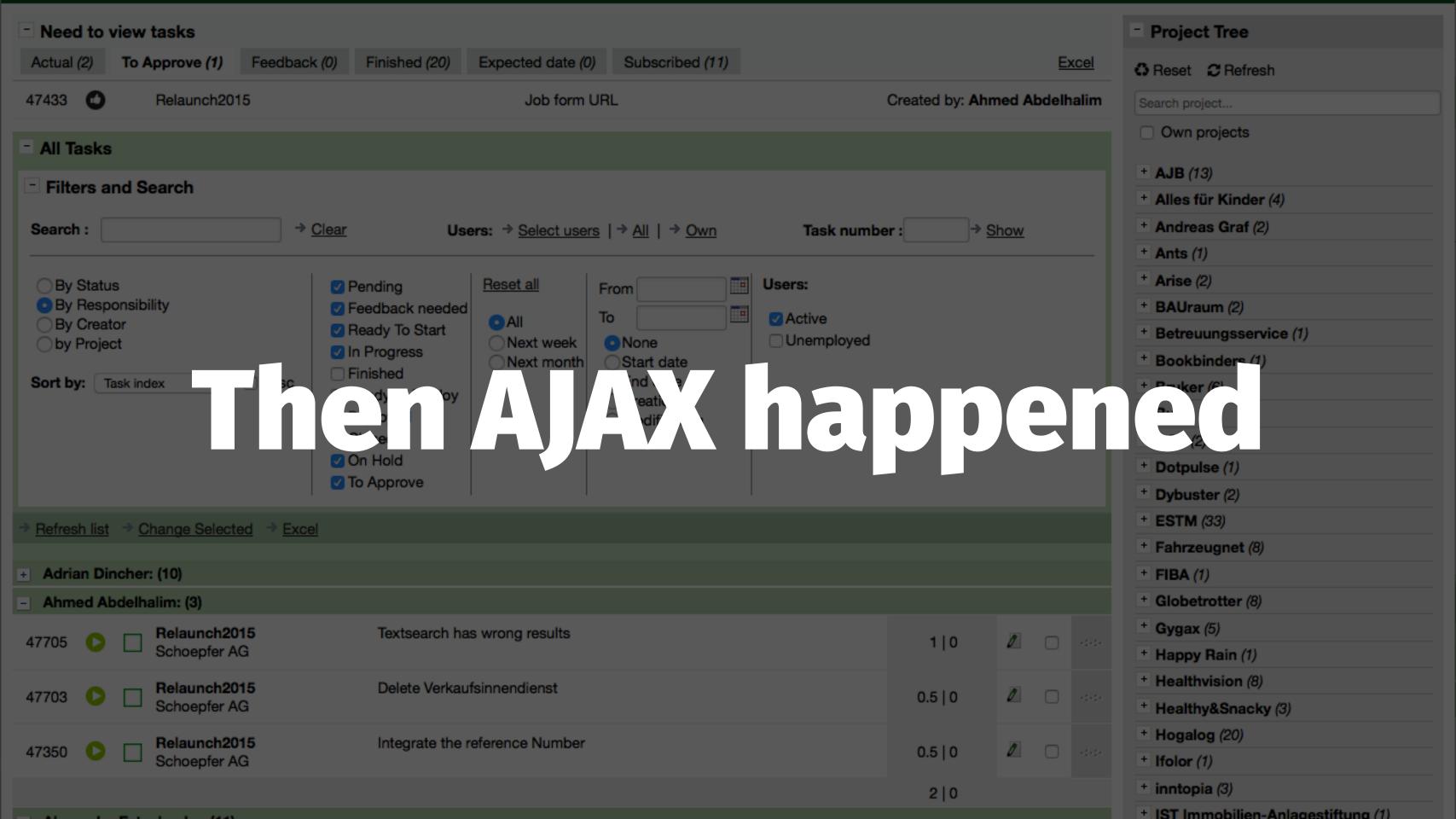
$$I = V/R$$

$$r(\Theta) = 1 - \sin(\Theta)$$

$$y = x^{2}$$

# Referential transparency

# Simple







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#### 5 minutes into someone else's Angular.js project



RETWEETS

803

**FAVORITES** 

767















11:46 AM - 23 Oct 2015









- → jQuery/UI
  - → Dojo
    - $\rightarrow YUI$
- → Backbone
- → Kendo UI
- → Knockout
  - → Ember
- → AngularJS
  - $\rightarrow$  ...

## While I was speaking, at least 2 new JavaScript frameworks have been released

### React is a quantum leap

### React

A JavaScript *library* featuring a virtual DOM for rendering HTML

### Elm

Functional programming language for the browser without runtime exceptions

# Quickdemo

### In essence



### The awesome

- 1. GUI as a pure function
  - → Utter simplicity
- 2. Interactivity is still there
- → handling is postponed to next frame

- → Unidirectional data flow
- → Single source of truth (a-la DB)
  - → No cascading updates
- → No combinatorial explosion of state transitions
  - → Trivial undo/redo support
  - → Seamless rendering on both client & server

# That's the future So much bigger than JavaScript