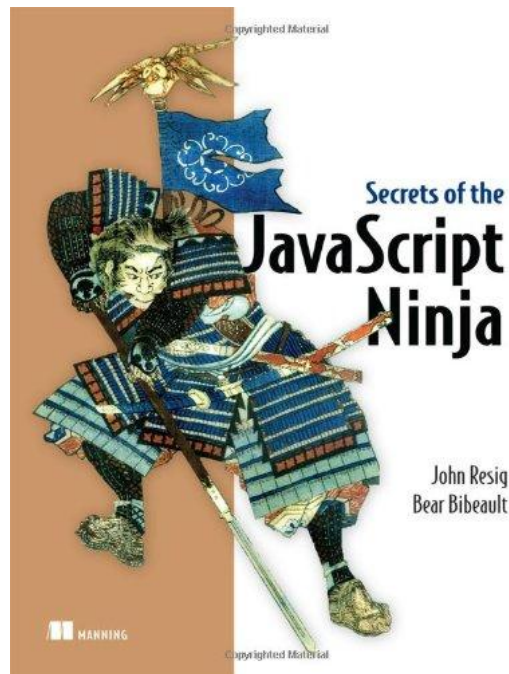
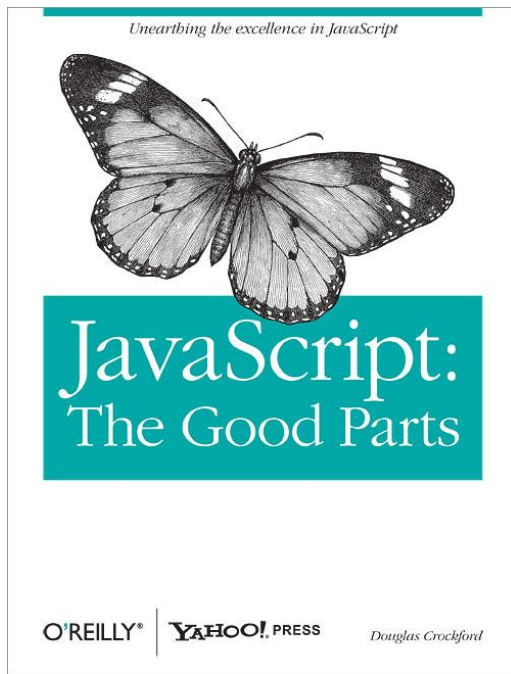


# Front-end Development

Timothy Kim

# JavaScript is hard!!!

Book recommendations:

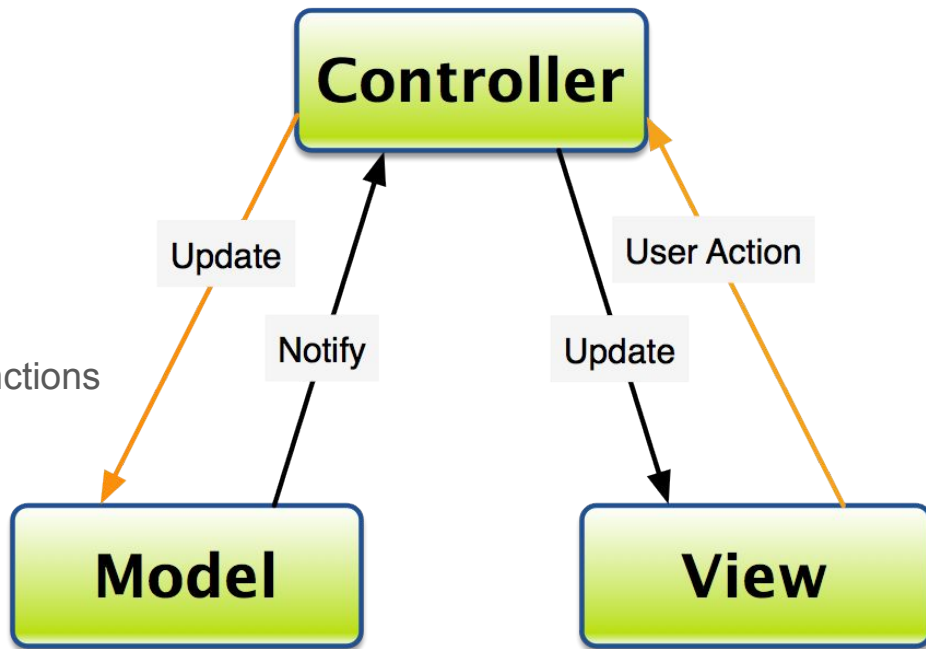


# JavaScript Tips

- Same as any other programming: modular design
- Stay away from global variables
- Separation of concerns
- Apply the same architectural discipline we learned for the server side

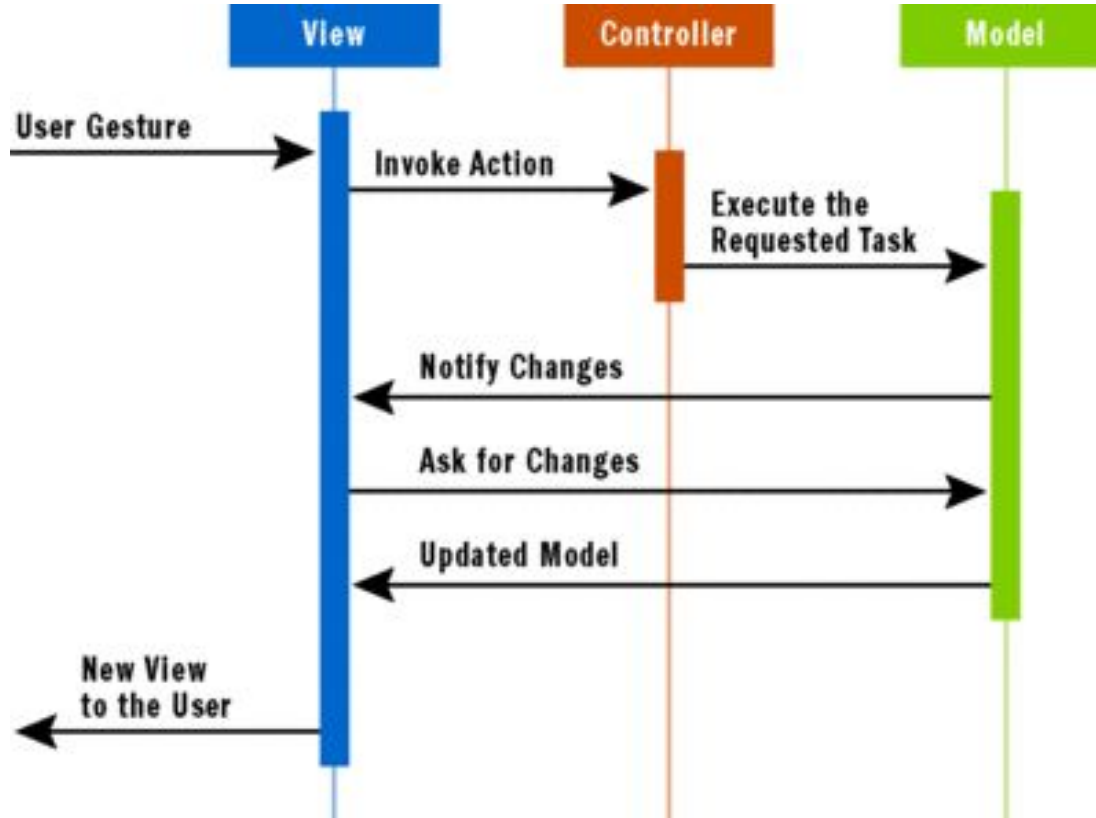
# Use MVC architecture!

- View
  - HTML and event bindings
- Controller
  - JavaScript functions that binds View and Model together
- Model
  - JavaScript Objects and its related functions



# Use MVC architecture!

- 



# Frameworks to the rescue

Frameworks	Type	Pros	Cons	Website
Backbone.js	Lightweight	You have ton of freedom on how you structure your data and code	Due to the freedom, you have more work to do	<a href="http://backbonejs.org/">http://backbonejs.org/</a>
AngularJS	Big but can use parts	Very powerful data model. Can use parts that you like.	High learning curve. Esoteric syntax. Can be slow	<a href="https://angularjs.org/">https://angularjs.org/</a>
Ember.js	Monolithic	Bit like Ruby on Rails. Everything is ready to go, you just put it together.	Lacks freedom to deviate from its convention	<a href="http://emberjs.com/">http://emberjs.com/</a>

# Libraries to the rescue

Libraries	Type
jQuery	Add lot of convenience method that makes DOM API better.
underscore.js	Adds functional programming constructs to JavaScript
REACT	Implements just the View portion of your application

# Demo