



Technology Series

AngularJS

01

Presented by
Subhash EP



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ANGULARJS
by Google®

Agenda – Introduction

Agenda – Introduction

01

AngularJS core concepts

Two-way binding

Demo Lab

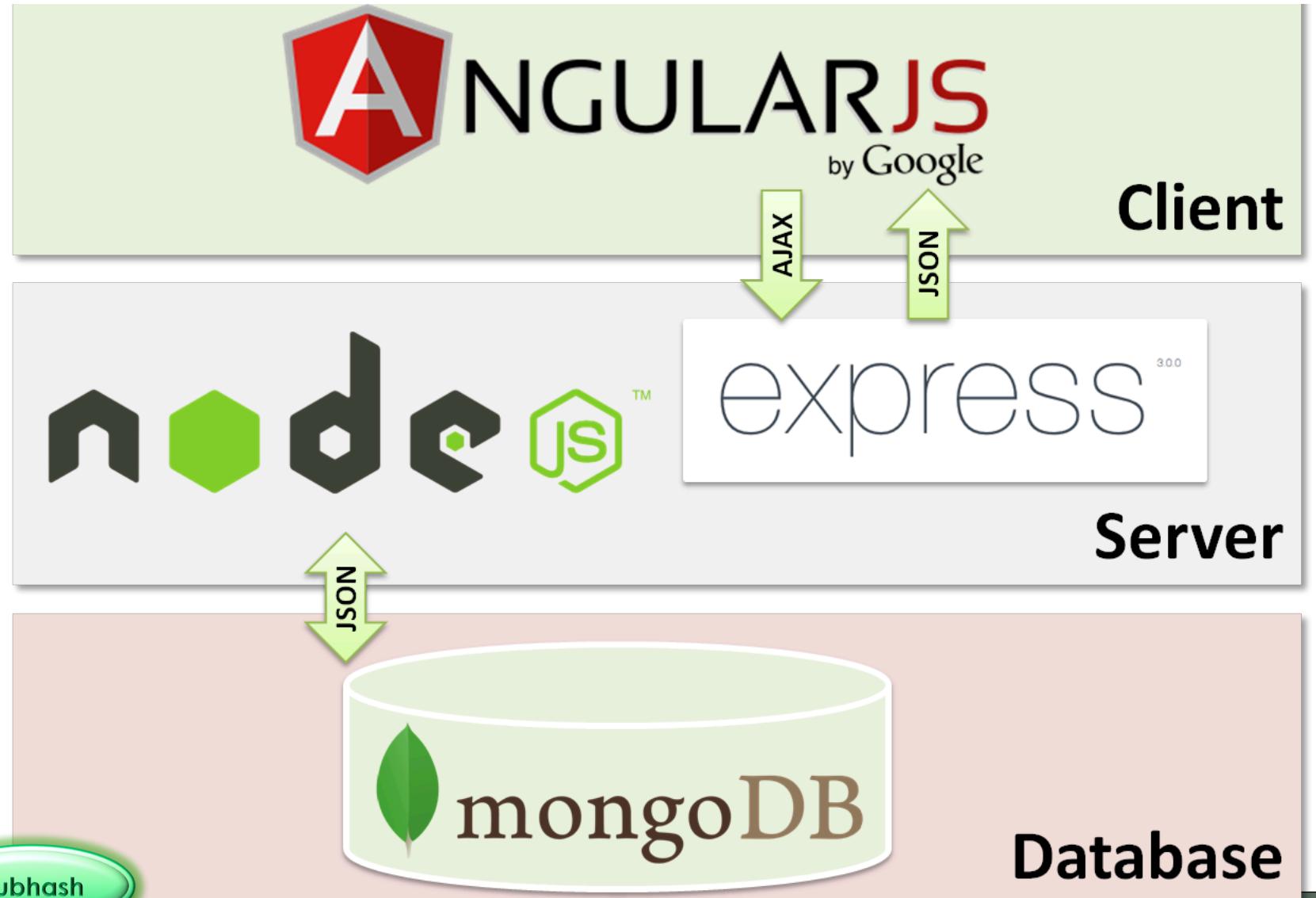
Welcome Code!!

01.01

AngularJS and MEAN



What do you MEAN?



AngularJS

- Dynamic Web App
 - Template: HTML
 - Presentation: CSS
 - Logic: JavaScript
- JavaScript Frameworks
 - JQuery
 - AngularJS

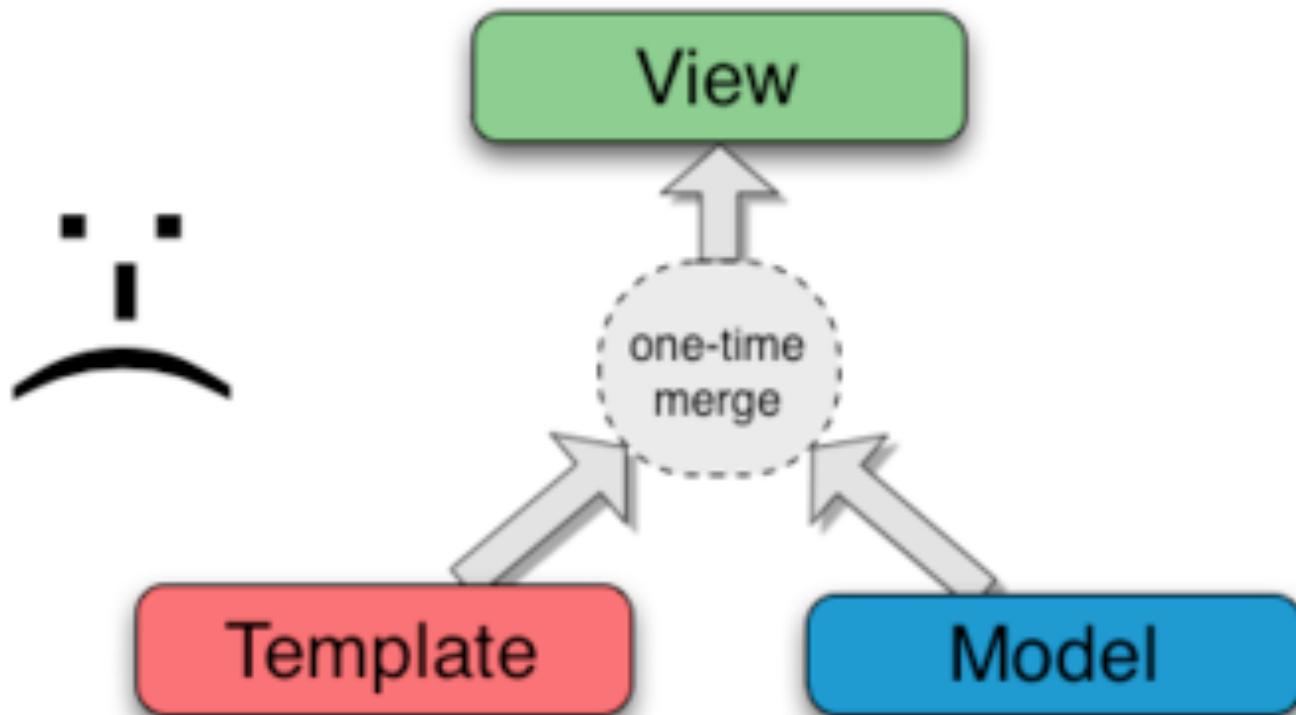
JQuery vs AngularJS

- JQuery is a library
- Angular is a MVVM framework.
- JQuery is included in Angular.js

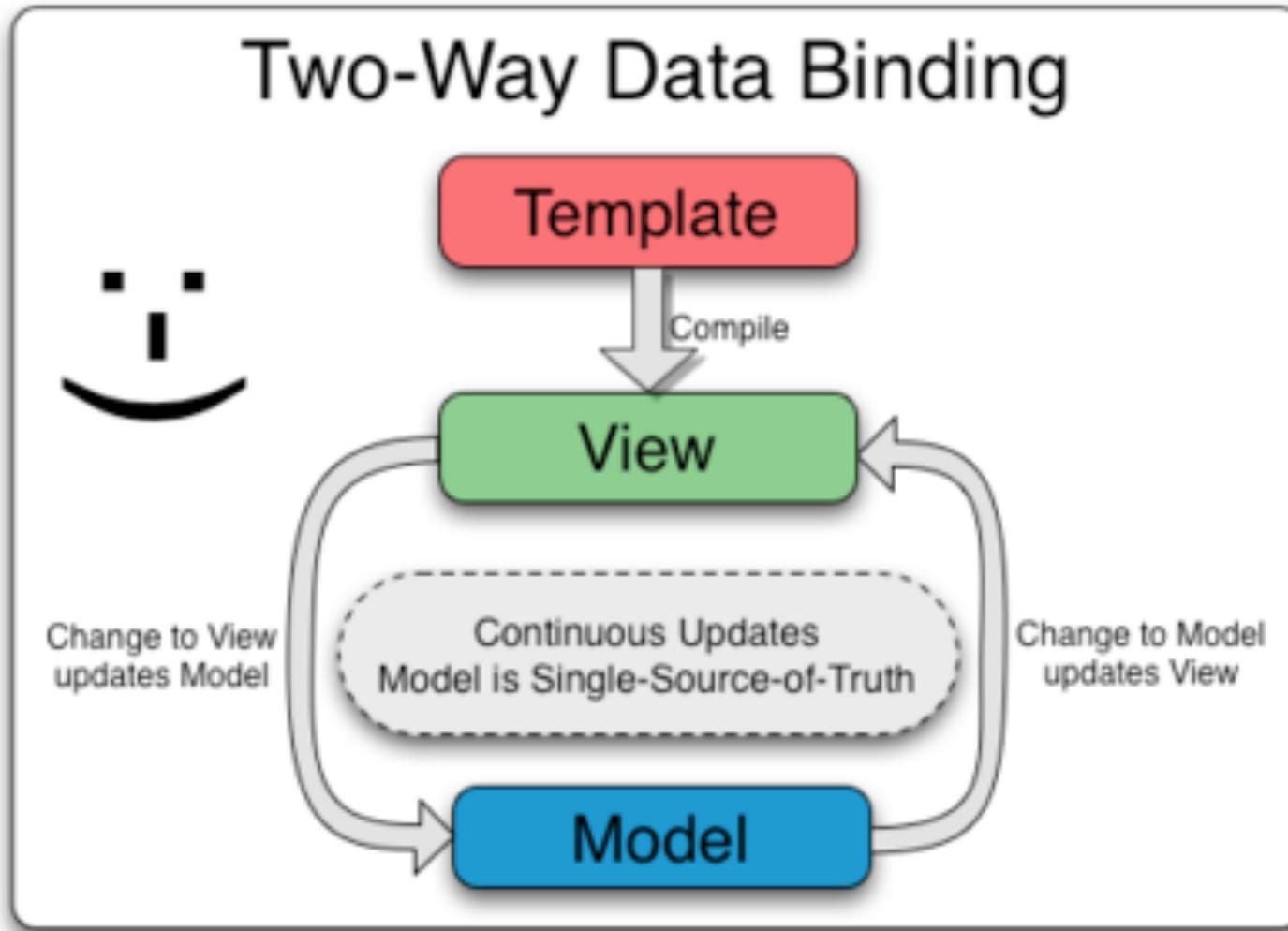


JavaScript One-Way Data Binding

One-Way Data Binding



AngularJS Two-Way Data Binding



Two-Way Data Binding

- Synchronization of data between
 - view (HTML) and
 - model (simple JavaScript variables [objects])
- In AngularJS
 - create templates (HTML)
 - bind different components with specific models (JS Objects)
 - Whenever model value changes, view automatically updated
 - Whenever value of any view component changes (e.g value of input text) bound model also updated

Agenda – Introduction

02

Routing basics

Templating basics

Validations introduction

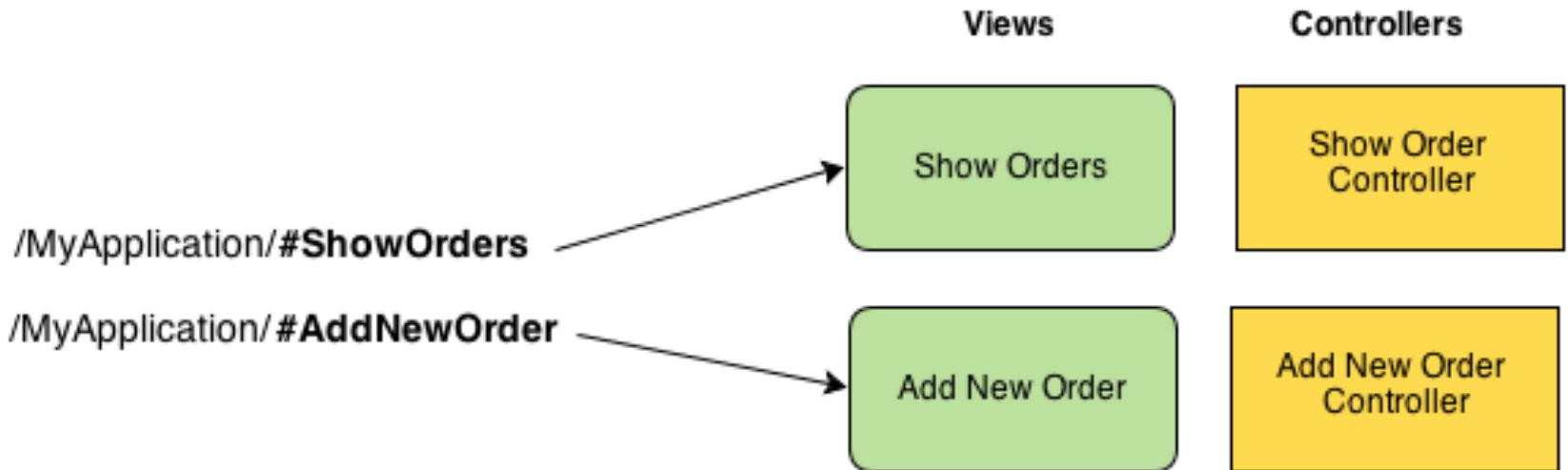
Directives concepts

What is dependency injection

Routing

- Single Page Apps (SPA)
- No page redirections
- Load content asynchronously on same page
- Routing, How?
 - create different views for different URLs
 - AngularJS will then load appropriate view in the main page when a specific URL is requested

Routing with Hash-tag URLs



Templating

- Simple HTML
- AngularJS Expressions
 - {{model_name}}
 - {{12 + 24}} // shows 36
 - {{firstname + " " + lastname}} //???
 - {{cost + tax}} // ???

Demo Lab Expressions

01.02

Validations

- Forms based CRUD apps
- High UX with feedback
- AngularJS forms incorporate
 - real-time form validations,
 - custom validators,
 - formatters
 - and much more

Directives

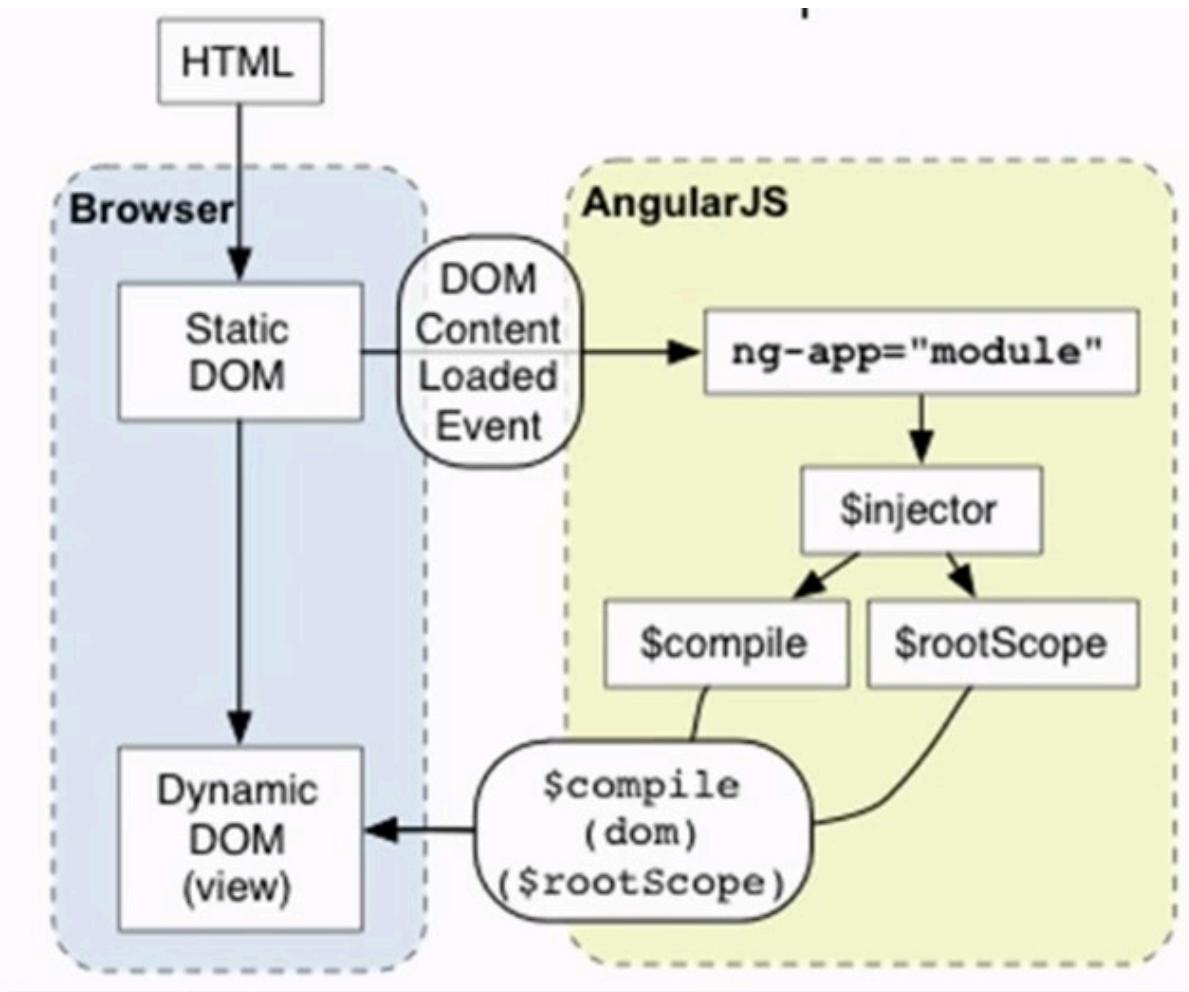
- AngularJS making HTML to do new things
 - By adding new elements/attributes
 - And teaching the new syntax to HTML
- HTML compiler (`$compile`) to attach a specified **behavior** to that DOM element
- directives built-in, like `ngBind`, `ngModel`, and `ngClass`

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Dependency Injection in AngularJS



Agenda – Introduction

03

Development environment

Sublime Text

Angular seed project

Anatomy of Angular Project

MVW, MVC, MVVM

Development Environment

- Let us start with simple things
 - Do you have Chrome browser?
 - And do you have a text editor?
 - I use Sublime Text 2 or 3
 - Great, we are now ready to start

Angular Seed Project

- Fixed structure for AngularJS apps
- Also pre-configured test environment
- Here is:
 - <https://github.com/angular/angular-seed/tree/69c9416c8407fd5806aab3c63916dfcf0522ecbc>
- Download Zip, Extract and you will get
 - angular-seed-master

Anatomy of an AngularJS app

- Model
- View
- Controller
- Scope
- Directives
- Expressions
- Templates

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Anatomy of an AngularJS app

- **Model:** The data shown to the users. The model data are simple POJOs (Plain Old JavaScript Objects).
- **View:** This is what the users see when they visit your page, that is to say after the raw HTML template involving directives and expressions is compiled and linked with correct scope.
- **Controller:** The business logic that drives your application

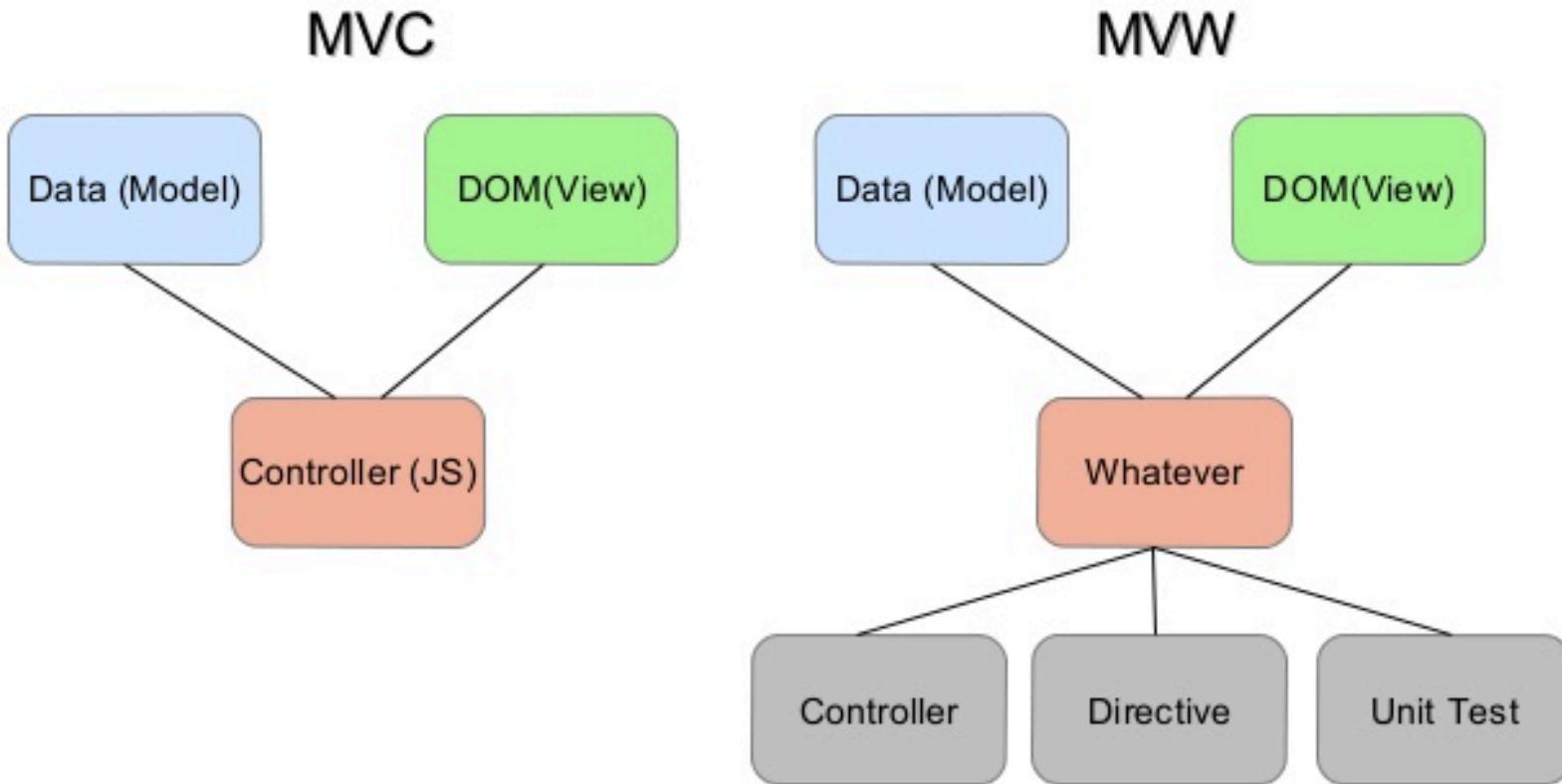
Anatomy of an AngularJS app

- **Scope:** A context that holds data models and functions. A controller usually sets these models and functions in the scope.
- **Directives:** Something that teaches HTML new syntax. It extends HTML with custom elements and attributes.

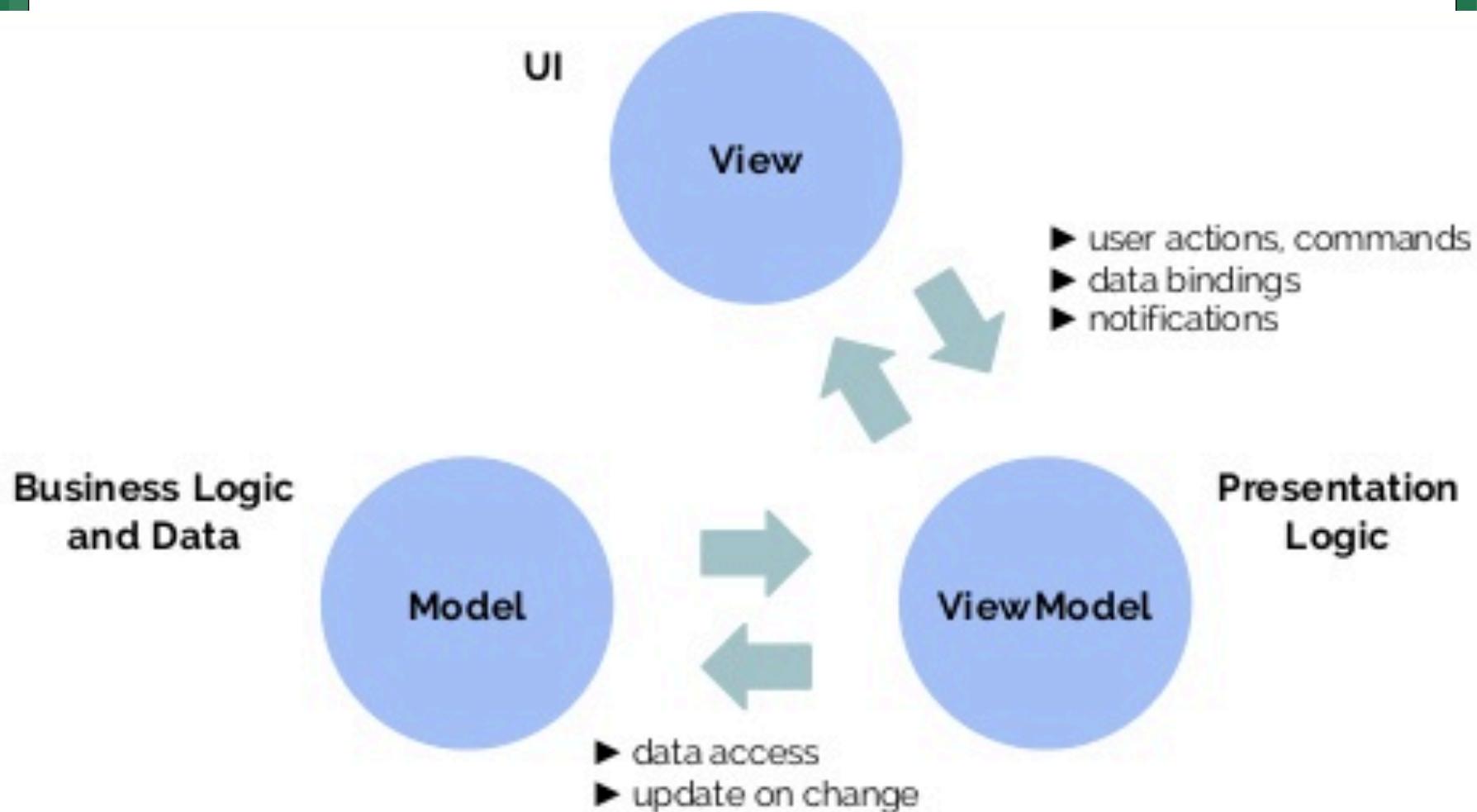
Anatomy of an AngularJS app

- **Expressions:** Expressions are represented by {{}} in the HTML. They are useful for accessing scope models and functions.
- **Template:** HTML with additional markup in the form of directives (<drop-zone/>) and expressions {{}}.

MVC vs. MVW



MVVM



That's all



End of Session

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