



Comparison Analysis Of Vue.js & Angular

Beauty and the Beast



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Introduction and Historical Background

Angular was created in 2009 by Misko Hevery, and then was acquired by Google. It is an excellent front-end JS framework, which has been used in many Google products. Angular is designed to overcome the weaknesses of HTML in building applications. Angular has many features, the core of which is MVC framework, modularization, automatic two-way data binding, semantic tags, dependency injection, etc. *Vue.js* is an open source progressive JavaScript framework used to develop interactive web interfaces. It was created by Evan You in 2014, an ex-employee from Google. It is one of the most famous frameworks used to simplify web development. Vue.js focuses on the View Layer. It can be easily integrated into big projects for front-end development without any issues.

Main Features and PROS&CONS



- 1. MVC (Model-View-Controller)
- 2. Dependency injection of Module and Controller:
- 3. Two-way binding: the operation of the interface can reflect the data in real time, and the change of data can show the interface simultaneously.
- 4. Perfect page instruction
- 5. Service (\$compile \$filter \$interval \$timeout \$http...)
- 6. Components are decoupled.

Angular

PROS	It's still JavaScript, but better
	Angular presents you not only the tools but also design patterns
	Components are decoupled
	Efficient, asynchronous programming
	High Performance
CONS	Google Long-Term Support
	Powerful ecosystem
	the display of error information is relatively weak
	Difficulties with backward compatibility
	Angular is too cumbersome
	Steep learning curve



- 1. MVVM (Model-View-ViewModel)
- 2. A component library based on HTML, CSS & JS makes it simple to get started
- 3. It's a progressive framework
- 4. Lightweight and efficient (Only ~30KB)
- 5. The essential features like routing and data management are covered by official libraries

Vue.js	
PROS	Two-way data binding
	Core team supported libraries
	Fast rendering ensured by virtual DOM and minimal load time
	It provides concise API to use.
	It adapts to the needs of the developer
	Single File components development
CONS	Vue.js Evolving Fast, it could be outdated easily
	Issues with iOS & Safari
	Vue.js does not have most of the common plugins, which does not achieve the purpose of simplifying development
	More Flexible than Needed
	Most of the code has been written in the Chinese language, which creates some issues for English speaking users

Comparison Of the Frameworks

Similarity on code :

1. Templating.

Technically, you can count on identical syntax. Syntax in both Vue.js and Angular:

```
{{expression}}
```

2. Model binding.

The syntax and the idea are very similar. Only the attribute names are different.

Angular:	Vue:
<pre><input ng-model="modelVariable"> <div ng-bind="modelVariable">...</div></pre>	<pre><input v-model="modelVariable"> <div v-model="modelVariable">...</div></pre>

3. Loops.

The Vue syntax is clearly inspired by Angular.

Differences are minimal. Notice that the Vue.js v-repeat syntax is simplified compared to the Angular syntax.

Angular:	Vue:
<pre><li ng-repeat="item in items"> {{item.name}} </pre>	<pre><li v-repeat="items"> {{name}} </pre>

4. Conditionals

Apart from the ng- and v- prefixes, the code is identical.

Angular:	Vue:
<pre><div ng-if="value"></div> <div ng-show="value"></div></pre>	<pre><div v-if="value"></div> <div v-show="value"></div></pre>

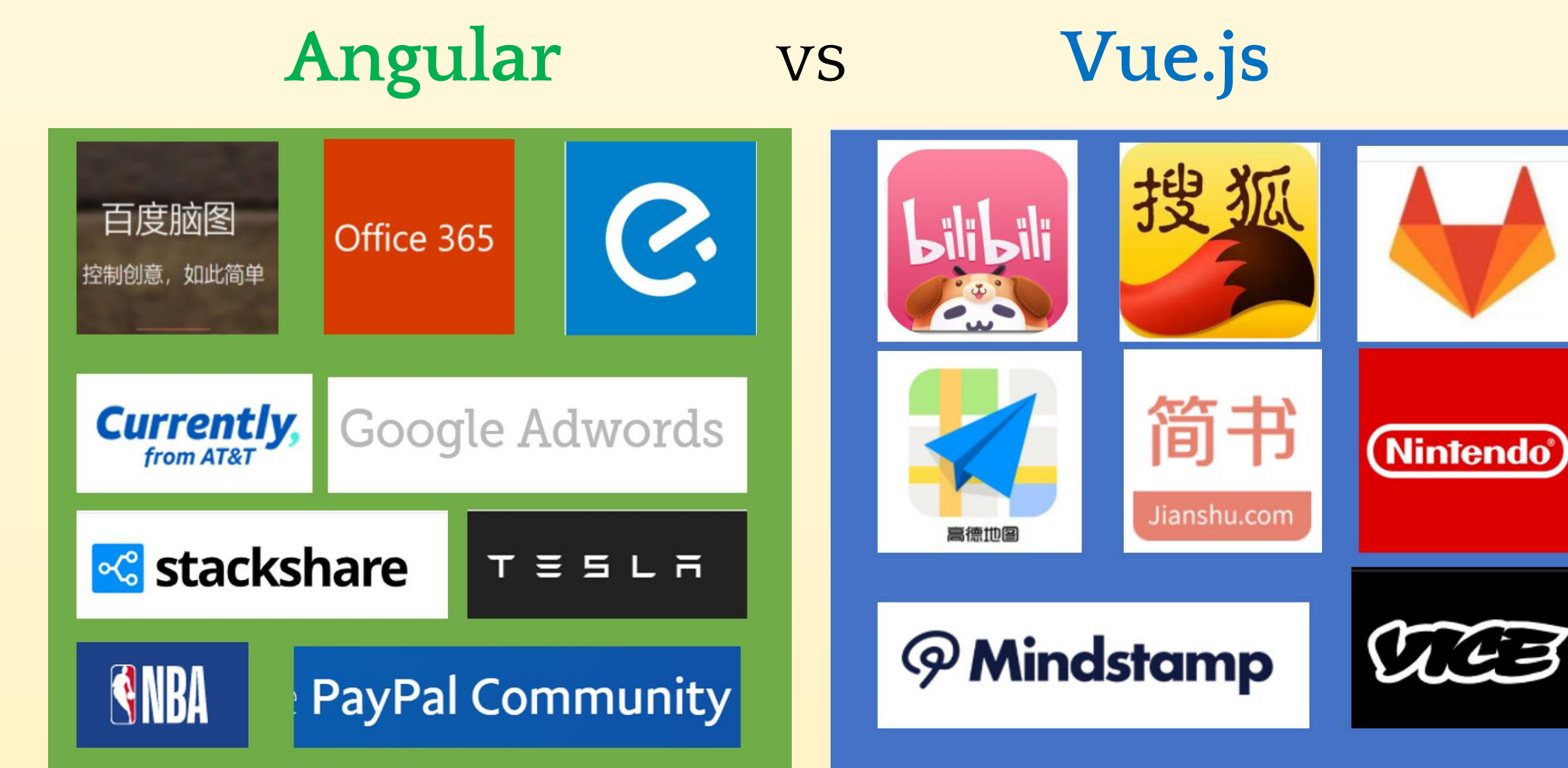
Differences:

You might say Vue.js is pretty damn similar to Angular, and you wouldn't be far from the truth. In fact, Evan You, the creator of Vue.js is an ex Google employee. In his own words, his initial concept behind the new library was to take what he really liked about Angular and make it lightweight.

What if I could just extract the part that I really liked about Angular and build something really lightweight. Evan You - creator of Vue.js

Characteristics	Angular	Vue.js
Size	~65KB gzipped	~30KB gzipped
Learning Curve	STEEP, familiarize yourself with a lot more concepts before getting productive	all you need is familiarity with HTML and ES5 JavaScript
Directives vs Components	directives do everything and components are just a specific kind of directive	clearer separation between directives and components
Popularity	Popular	Slowly gaining places
Dependencies	Has to import the required modules	Does not have built in feature
Compatibility	Projects developed in AngularJS can't be converted to Angular2 due to core differences.	Good with backward compatibility
TypeScript	User need to have understanding of TypeScript to begin with Angular.	Coding can be done anywhere in codepen using CDN library.
Flexibility	Not that easy to start working with other existing projects.	Can be easily merged with other projects without any issues.
Complexity	Little difficult for beginners to start with it.	Beginner can take the CDN library and start with it.
Performances	Fast and decent pace for front-end development.	Faster and lighter than Angular.

Examples of use



Angular is a highly popular corporate solution. Banks, financial institutions, and backend developers normally favor Angular. Angular is backed by Google, and companies like WhatsApp, Instagram, PayPal, and many other established companies use it.

Vue on the other hand is great for simple, performant applications, as well as for rapid prototyping.

Conclusion

- Angular is for enterprise-scale applications, it is a better option for those developers who need to deal with both client side and server side modes.
 - Vue.js is for light-weighted programs. If developers are looking for easier product creation, they should choose Vue JS. It would be a more helpful option when your JavaScript fundamentals are not too strong.
- Vue JS is lightweight and acts as a fitter little brother of Angular JS. **If you want a less opinionated framework, Vue JS is a better choice than Angular JS whereas Angular JS is a preferred way of building complex applications, yet good quality.** So basically which one is perfect boils down to the nature of the project and learning capability of a developer. But Angular JS vs Vue JS both JavaScript frameworks can give the best results for your application development.

References

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